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⑥ Army Posts in American Culture; A Historical Geography of
Army Posts in the United States,

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The Pennsylvania State University

The Graduate School

Department of Geography

Army Posts in American Culture: A Historical Geography
of Army Posts in the United States

A Thesis in

Geography

by

David William Rhyne

Submitted in Partial Fulfillment
of the Requirements
for the Degree of

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ABSTRACT

Armies reflect their societies. The social composition of the United States played an important role in shaping the nation and the Army. Throughout the nation's history, the Army has reflected that composition and the particular circumstances of the environment.

Cultural artifacts are physical evidence of a group's values and traditions. This paper uses Army posts as cultural artifacts to trace American culture in general, and Army culture in particular. Developments in culture were reflected in the changing locations and appearances of Army posts.

Army posts in the United States can be divided into three distinct groups. Stone and masonry coastal forts came to America from Europe. They reflected the close cultural ties between the United States and Europe, while at the same time they reflected efforts of the young nation to break those ties. Frontier forts had the same origins as stone forts, but they functioned under different circumstances. Their march across the continent was highly reflective of the peculiar nature of the Army on the American frontier. The emergence of modern Army posts was not possible until the end of the nineteenth century. Several factors combined to end the era of the

frontier and bring the United States into the world of
international politics. The changes were dramatic, and
once again they were reflected in the locations and
appearances of Army posts. The modern volunteer Army
has been the latest phase in the development of the Army
and its posts. Recent changes in posts have reflected
efforts to improve morale of the post-Vietnam Army and
bring it closer to civilian society.

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CHAPTER I

THE ARMY AND AMERICAN SOCIETY

Armies and Academics

From the beginning of the modern state, warfare
and armies have played a vital role in the shaping of
societies. Governments have used armies to expand
societies, and armies have been used to enforce and
defend the very existence of societies. In the name of
humanity the violence of war has been denounced. Men
have attempted on numerous occasions to end the need for
war through such organizations as the League of Nations
and the United Nations. Attempts have been made to limit
the horrors of war through rules such as the Geneva
Conventions of recent history, or the Truce of God in
the Middle Ages (Montross, 1960, 133). The Kellogg-
Briand Treaty of 1928 even outlawed war as an instrument
of foreign policy. Yet, despite man's professed abhor-
rence of such violence, war has remained an integral part
of history.

Even the most pacific societies have found it nec-
essary to maintain some form of military organization.
Distinctly warlike societies, such as Sparta or Hitler's
Germany, found it desirable to militarize as much of the
population as possible. Other societies, such as the

modern democracies, have attempted to maintain the smallest military forces possible. To such societies standing armies appear as much a threat to the maintenance of democratic ideals as they are an aid to the security of those ideals (Montross, 1960, 310). Even nations that have professed neutrality in the world's affairs have found it necessary to maintain military organizations. Until World War II one of the leading principles of American foreign policy was neutrality toward the affairs of Europe. Yet, the need for an army was recognized from the very beginning, and Congress was given the power by the Constitution to "raise and support armies" (Article 1, Section 8).

Libraries are filled with volumes of scholarly works related to the conduct of wars. Heroes of wars have gone on to become leaders even of the democratic nations. Presidents Washington, Harrison, Jackson, Taylor, Grant, and Eisenhower were each elected partly in recognition of their military exploits. The last three men mentioned were professional soldiers and had spent much of their lives in uniform. Despite the recognized importance of war and armies, it remains true that "the study of military history has all too often been undertaken as if war always existed in a vacuum" (Preston, 1956, 1).

Armies have all too often been viewed as nothing more than instruments of war. Their organization has been

studied with a view toward tactics and battles. The
life of the soldier has too often been viewed in the
misery or the adventure of war. The forts and camps
of armies have seldom been studied except in the con-
text of their purpose for war. Yet, armies exist in
peacetime as well as in war, and their duties have not
been limited to fighting wars or preparing for them.
The United States Army played a critical role in ex-
ploring, surveying, and settling the nation. It has
been a permanent part of American society since the
Revolution.[1]

One of the central themes of geography concerns
the effects that man and his environment have upon one
another, but the particular role that armies play in
this relationship has been largely ignored. Geographers
have studied armies in the context of strategy and geo-
politics, but very little work on peacetime military
geography has been done.[2] During both World War I and

[1]There are certainly exceptions to the idea that
armies have been studied in a vacuum, particularly in
the fields of history and political science. One of
the most comprehensive recent histories of the U. S.
Army is Russel F. Weigley's History of the United States
Army (New York: The Macmillan Company, 1967), which
deals particularly well with the relationship between
the Constitution, the government, and the Army.

[2]Most of the recent geographic work dealing with
the peacetime military is in the realm of economic
geography. Clyde E. Browning dealt with the impact of
federal expenditures, including military, on the land-
scape in The Geography of Federal Outlays: An Introductory
and Comparative Inquiry (Chapel Hill: University of North

World War II geographers served with the military,
particularly in the mapping and intelligence agencies,
and they played a vital role in the formulation of
national strategy through their studies of the physical
and human geography of foreign countries (James, 1972,
427-451). In the eyes of geographers, however, this
work was in the field of applied geography. It was not
particularly worthy of academic pursuit, and following
the wars most academic geographers left the military.
They also left behind their interest in military affairs.
A review of the major geographic journals today uncovers
few studies concerning peacetime military subjects.[1]

This neglect of military affairs is not peculiar
to geographers. Americans have long had a distrust of

Carolina, Department of Geography, 1973). Douglas F.
Loveday wrote on The Role of U. S. Military Bases in
the Philippine Economy (Santa Monica, California: Rand
Corporation, 1971). Ian D. Terner struck closer to
home with a study of the "Economic Impact of a Military
Base: A Case Study of Fort Devens and Ayer, Massachusetts"
(Master's Thesis, Harvard Graduate School of Design,
1965).

[1] A close look at The Geographical Review from 1936
through 1977 revealed only seven articles dealing with
military subjects. Three of them dealt directly with
World War II, and four dealt with mapping requirements
for wartime operations. The Annals of the Association
of American Geographers contained numerous articles
dealing with wartime operations, military intelligence
requirements, and mapping requirements. Most such
articles were concentrated during and immediately after
wars. The subject of this thesis, army posts, was men-
tioned only once in an article by Derwent Whittlesey,
"The Impress of Effective Central Authority Upon the
Landscape" (Vol. XXIV, 1934). The Journal of Geography
from 1897 to 1956 contained three articles on military
geography, two on maps and one on wartime operations.

armies or anything else of a military nature. It is a
distrust resulting from years of cultural development in
Europe before the nation was even founded. It is part
of what one geographer described as "an intense, almost
anarchistic individualism" (Zelinsky, 1973, 40) that
permeates American culture and leads to a dislike of
anything that can threaten that individualism. It is a
natural human response to ignore those things which are
displeasing. The existence of an autocratic military
society within a democratic nation of individualists is
displeasing to the population; therefore, it is largely
ignored. Like government, the Army is a "necessary
nuisance" (Zelinsky, 1973, 45), and most Americans have
as little to do with it as possible.

The Army as a Reflection of Society

"Armies reflect the society from which they spring"
(Preston, 1956, 13). This is true of an autocratic
society such as Prussia, or Hitler's Germany, or the
Soviet Union. It is equally true of democratic societies
such as the United States. A study of the United States
Army presents some interesting clues to American culture
in general. The United States Army, through its control
by an elected Commander-in-Chief, an elected Congress,
and a civilian Secretary of Defense and Secretary of the
Army, probably reflects its society as well as any army
on earth.

The American Immigrant

Americans' attitudes toward their Army did not emerge by accident. They came with the immigrants from Europe. The United States "belongs to the Greater European cultural realm . . . " (Zelinsky, 1973, 5). It was from Northwest Europe, and particularly Great Britain that the basic elements of our culture were derived. Europeans settled this country, and they brought with them their attitudes and their technology (Zelinsky, 1973, 5). They also brought with them their knowledge of military organization and their prejudices toward armies that set the stage for the creation of a military institution different from any previously known.

> The American is a new man, who acts upon new principles; he must therefore entertain new ideas, and form new opinions. From involuntary idleness, servile dependence, penury, and useless labour, he has passed to toils of a very different nature, rewarded by ample subsistence (Crèvecoeur, reprinted 1962, 44).

The migrants who left Europe and came to settle the present United States were not a representative cross-section of European society. Many of them were people who could not or would not adjust to the religious, social, and economic conditions of Europe as they existed under the rule of divine right monarchs and dictators. Many of them saw America as a land of unprecedented freedom and opportunities. "Formerly they were not numbered in any civil lists of their country, except in those of the poor; . . . (Crèvecoeur, reprinted 1962, 42).

Years of persecution and war had taught them to fear
and despise not only the monarchs and dictators, but
also the professional armies that imposed their will
upon the people. The Quakers even founded a colony in
Pennsylvania based upon the distinctly un-European notion
of pacifism.[1] For a few years of labor in America, most
such migrants were able to obtain a plot of land and the
title of freeman, a position they could never have attain-
ed in Europe. They loved their individual freedom as much
as they loved their new home, and they learned to protect
that freedom from within and without.

Migrants to America came from all parts of Europe,
but with the exceptions of the German areas of Pennsylvania,
the "First Effective Settlements" (Zelinsky, 1973, 14)
from Georgia to Massachusetts were made by the English.
Along with their prejudices toward kings and armies, these
settlers brought with them a knowledge of the English sys-
tem of militia, which had persisted in England until the
Great Rebellion of 1642. It was a system born out of
feudalism and the longbow, and it depended upon a set
number of citizen soldiers coming forth from each county
to defend the homeland from invasion. By virtue of
England's physical isolation from mainland Europe, and

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[1] For an excellent and thorough look at the character-
istics of early migrants to America see J. C. Furnas, The
Americans; A Social History of the United States, 1587-
1914 (New York: G. P. Putnam's Sons, 1969), pp. 47-123.

her growing naval power, the militia system had survived
in that country long after standing armies were common
on the Continent (Montross, 1960, 294). The repressive
measures of Cromwell's New Model and the armies of later
monarchs went far toward cementing the hatred of standing
armies by immigrants to America and providing the impetus
for the use of militia in the Thirteen Colonies (Preston,
1956, 111).

A unique set of circumstances allowed the militia
tradition to thrive in the American colonies. Like
England, the new land was separated from its major enemies
by a large body of water. America was even more isolated
by distance than England. Prior to the Revolution, the
numerous conflicts with the Indians were fought by colo-
nial militia with the help of the British Army. The
backwoods, individualist tactics of the militia proved
more than adequate. Not only was the British Army under
Braddock routed by the French and Indians in 1755, but
the colonial militia under George Washington provided the
only bright spot of the battle (Dupuy, 1961, 22). The
British Army was later roughly treated by American militia
at such battles as Lexington, Concord, and Bunker Hill.
Such episodes may have been as much the result of inept
British commanders as anything else, but they established
a legend of militia invincibility and a belief in the
superiority of zealous part-time American soldiers that
went well with American distaste for standing armies

(Ketchum, 1958, 98-109).

Birth of an American Army

By the time the American colonies went to open revolt against England, the colonists had a long tradition of distrust and contempt for standing armies. They certainly did not like paying taxes to support such institutions that posed a threat to their personal freedom. On the other hand, the very weakness of America's situation in relation to the powers of Europe and the continuous Indian wars on the frontier, forced America's leaders to recognize that some form of military organization was necessary. A look at the Declaration of Independence, the Constitution, and other documents of the period shows that the founders of the United States paid very careful attention to the defense of the country and the need for an army. They also took pains to express the tyrannies of standing armies as they knew them, and they were careful to prevent those tyrannies from occurring in this country. In the Declaration of Independence the King of England was cited for exposing the Colonies "to all the dangers of invasion without, and convulsions within." In other words, he had not provided the Colonies with adequate defense. Even so, he was also cited in the same document, because:

> He has kept among us, in times of peace, standing Armies, without Consent of out legislatures.
> He has suffered to render the Military independent of and superior to the Civil power.

He has . . . given Assent . . . ; For quarter-
ing large bodies of troops among us: For protecting
them by mock Trial from punishment from any murders .
. . .
He is at this time transporting large Armies of
foreign Mercenaries to complete the works of death,
desolation, and tyranny . . . .

When the Constitution was ratified in 1789, it recog-

nized the need to "provide for the common defense, . . ."

(Preamble) through the organization of an army. It gave

Congress the power to:

. . . lay and collect taxes, duties, imports and
excises, to pay the debts and provide for the common
defense . . . (Article 1, Section, 8, Paragraph 1).
To raise and support armies, but no appropriation
of money to that use shall be made for a longer term
than two years (Article 1, Section 8, Paragraph 12).

Obviously, an army could not survive without money.

By giving Congress the power to control the appropriations,

and further limiting those appropriations to two years,

the Constitution very effectively put the United States

Army under the control of Congress. In practice, most

appropriations have been made for only one year, partic-

ularly during time of peace, thus further strengthening

the control of Congress. Additional powers of Congress

over the military were:

To make the rules for the government and regula-
tion of the land and naval forces;
To provide for calling forth the militia to
execute the laws of the Union, suppress insurrections
and repel invasions;
To provide for organizing, arming, and disciplin-
ing the militia, . . . ;
To exercise exclusive legislation . . . over all
places purchased . . . , for the erection of forts,
magazines, arsenals, dockyards and other needful
buildings; . . . (Article 1, Section 8, Paragraphs
14-16).

These provisions gave Congress control over the
organization and discipline of the Army, and over the
Army posts where the soldiers lived and trained. They
also provided for some federal control over the state
militias, although the role of militia units was clouded
(until the implementation of the National Defense Act of
1920) by the interpretation among many people that militia
could only be used within the territory of the United
States, and by the fact that the militia could only be
called to service for very short periods of time (Weigley,
1967, 120 and 399).

The Constitution further guarded against the growth
of independent state armies by providing that:

> No State shall, without the consent of Congress,
> lay any duty of tonnage, keep troops, or ships of
> war in time of peace, enter into any agreement or
> compact with another State, or with a foreign power,
> or engage in war, unless actually invaded, . . .
> (Article 1, Section 10).

The Constitution not only put Congress in control of
the Army, but it also provided for a civilian commander
in the person of the President, and it insured that the
President's ability to usurp military power would be
limited:

> The President shall be commander in chief of
> the army and navy of the United States, and of the
> militia of the several States, when called into the
> actual service of the United States; . . . .
> He shall have the power, by and with the advice
> and consent of the Senate, to make treaties, provided
> two-thirds of the Senators present concur; and he
> shall nominate, and by and with the advice and consent
> of the Senate, shall appoint ambassadors, . . . and
> all other officers of the United States, . . .
> (Article 2, Section 2).

Finally, in the Bill of Rights, three of the first
ten amendments to the Constitution represented well the
prevailing opinions toward armies and the militia. They
had a lasting effect upon the size of the Army, the
creation of separate garrisons for troops, and the rights
of soldiers and citizens of the nation. The Fifth
Amendment particularly recognized that the internal
discipline of the armed forces required different laws
for soldiers than for civilians.

> A well regulated Militia, being necessary to
> the security of a free State, the right of the
> people to keep and bear Arms, shall not be infringed
> (Amendment I).
> No Soldier shall, in time of peace be quartered
> in any house, without the consent of the Owner, nor
> in time of war, but in a manner to be prescribed by
> law (Amendment III).
> No person shall be held to answer for a capital,
> or otherwise infamous crime, unless on a presentment
> or indictment of a Grand Jury, except in cases arising
> in the land or naval forces, or in the Militia, when
> in actual service in time of War or public danger
> [emphasis mine]; . . . . (Amendment V).

Many changes in American culture have been reflected
by changes in the Army (see figures 1 and 2), but one of
the underlying and continuing factors has been the fear
and distrust held by many citizens toward military organi-
zations. Although the nation won its independence with
the Continental Army, even General Washington warned the
people to "avoid the necessity of those overgrown military
establishments, which . . . are inauspicious to liberty,
and which are . . . particularly hostile to Republican
Liberty" (Washington's Farewell Address, 1796). Following

Figure 1. Strength of the United States Army, 1790-1976. Changes in the size of the Army have signified changes in the internal and external relationships of the United States. The major wars are indicated by peaks in Army strength. Economic depressions are shown in the graph by valleys, and so are periods of strong anti-military sentiment. After each war the size of the Army remained at roughly twice its pre-war size. The major exception to this was at the close of World War II, followed closely by the Korean War, when the United States suddenly emerged as the world's foremost power and arbiter.

SOURCE: U. S. Department of Commerce, Bureau of the Census, Historical Statistics of the United States, Colonial Times to 1920 (Washington, D. C.: U. S. Government Printing Office, 1975), pp. 1141-1143.

STRENGTH OF THE UNITED STATES ARMY, 1790-1976
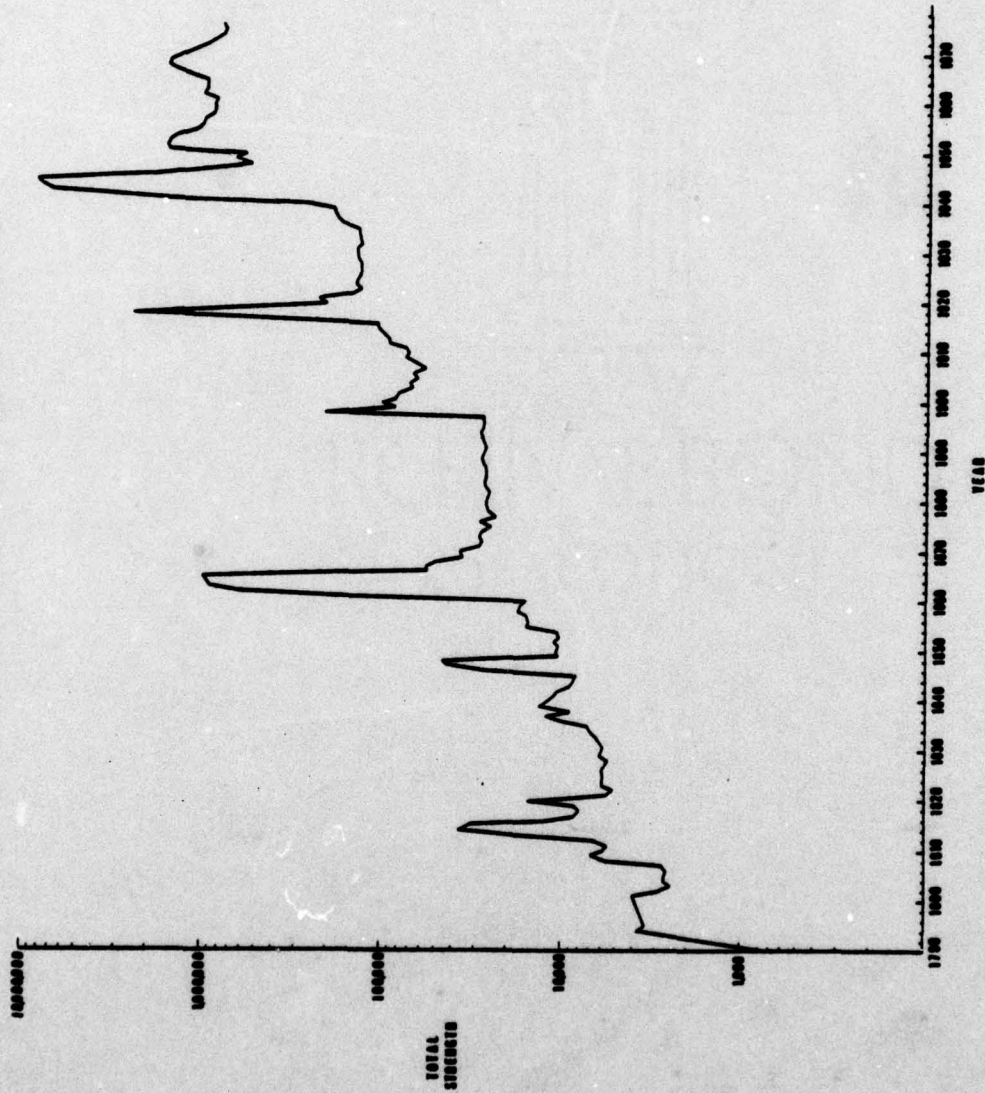
Figure 2. Expenditures of the United States Army as a Percentage of Total Government Outlays, 1789-1975. Taxes support the Army, and taxes have traditionally been a major cause of concern among Americans. Basic economic and cultural factors within the nation have been perhaps better illustrated by the relative amount of money spent on the Army over the years than by a simple measure of strength.

SOURCES: U. S. Department of Commerce, *Historical Statistics of the United States, Colonial Times to 1970*, pp. 1114-1115. U. S. Department of Defense, Department of the Army, *Financial Statements* (Washington, D. C.: U. S. Government Printing Office, published monthly since 1947).

EXPENDITURES OF THE UNITED STATES ARMY AS A PERCENTAGE

OF TOTAL GOVERNMENT EXPENDITURES
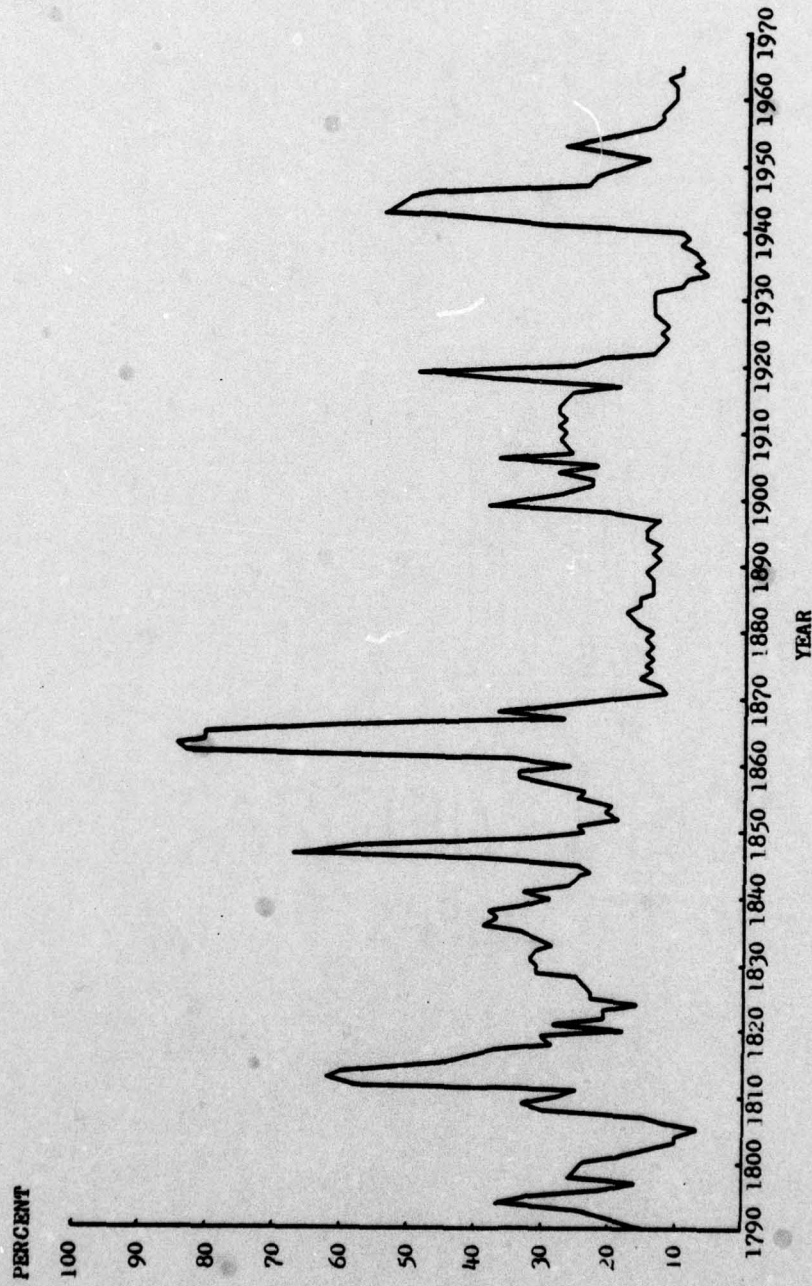
the Revolution, Congress made the first of many peace-
time reductions of the Army by an act of 2 June 1784:

> And whereas standing armies in time of peace
> are inconsistent with the principles of republican
> governments, dangerous to the liberty of a free
> people, and generally converted into destructive
> engines for establishing despotism; . . . .
> It is therefore resolved, that recommendations
> in lieu of requisitions shall be sent to the several
> States for raising the troops which may be immediately
> necessary for garrisoning the Western posts and guard-
> ing the magazines of the United States . . . the
> commanding officer . . . is hereby directed to dis-
> charge the troops now in the service of the United
> States, except twenty-five privates to guard the
> stores at Fort Pitt and fifty-five to guard the
> stores at West Point and other magazines, with a
> proportionable number of officers, no officer to
> remain in service above the rank of captain (quoted
> in Dupuy, 1961, 38).

The Continental Army ended, and the United States
Army began with this act of Congress. Although it was
an Army of only eighty privates, it was part of the
culture of a new nation. It has reflected that culture
ever since.

Even though the Army is in large part a reflection
of American society, it also has a culture of its own.
The Army is of necessity an authoritarian organization.
For obvious reasons it is organized along principles of
simplicity, order, and discipline. It would be impossible
for any army to function in an atmosphere of "anarchistic
individualism" (Zelinsky, 1973, 40). The United States
Army may be composed of Americans who were raised in an
atmosphere and legend of individualism, but a great deal
of that individualism must disappear in a world of disci-

pline and order. It may seem paradoxical that an authoritarian organization could exist in a democratic society, but it is this combination that gives the United States Army some of its special character.

Army Posts as Cultural Artifacts

Geographers have long used material artifacts as indications of cultural expression. Some scholars have used the architecture of homes and buildings to represent the ideas of cultural groups.[1] At least one geographer has traced the Pennsylvania culture region through the distribution of its barns.[2] Some geographers trace the economy and culture of America through its cities and towns, while others have delineated culture groups by their languages, accents and personal habits.[3]

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[1] For one of the better general studies of architecture as it relates to American culture see John Burchard and Albert Bush-Brown, The Architecture of America: A Social and Cultural History (Boston: Little Brown, 1961). Another work is Alan Gowans, Images of American Living: Four Centuries of Architecture and Furniture as Cultural Expression (Philadelphia: J. B. Lippincott Company, 1964). Fred Kniffen is one of the better known geographers who specializes in folk architecture. See Fred Kniffen, "Folk Housing: Key to Diffusion," Annals of the Association of American Geographers 26 (December 1965): 549-577.

[2] See Joseph W. Glass, "The Pennsylvania Culture Region: A Geographical Interpretation of Barns and Farmhouses (Ph. D. dissertation, Pennsylvania State University, 1971).

[3] The study of cities and towns covers the complete field of urban geography, which is largely economic in orientation. Geographers also study the cultural aspects of cities and towns. For an example of the small town as a part of American culture see Peirce F. Lewis, "Small Town in Pennsylvania," Annals of the Association of

In the same manner as these, Army posts are cultural
artifacts. They represent the ideas and resources of
not only the people who live in the Army, but also those
who control and influence it from outside the Army.

Army posts are particularly intriguing as cultural
artifacts, because they are almost inevitably the result
of some kind of conscious group effort. While barns and
houses may sometimes be the result of unconscious choices
by individuals or groups, Army posts are often designed
and planned at the highest levels of government. They
are designed to house and help train the Army, and to
act as bases for the deployment of military forces. Over
the years, a nation founded largely in fear and distrust
of military power has become recognized as one of the
greatest military powers in the world. That apparent
contradiction has been reflected in the changes that have
occurred to Army posts through history.

American Geographers 62 (June 1972): 323-351. One
example of a study at a larger scale is David Ward,
Cities and Immigrants: A Geography of Change in Nine-
teenth Century America (New York: Oxford, 1971).
    There are numerous examples of geographers using
languages, accents, names, or habits to indicate cultural
ideas. One of the better known is Hans Kurath, A Word
Geography of the Eastern United States (Ann Arbor:
University of Michigan Press, 1949). H. L. Mencken is
also well known for his studies of the American language.
For a look at the influence of culture on names see
Wilbur Zelinsky, "Classical Town Names in the United
States: The Historical Geography of an American Idea,"
The Geographical Review 57 (October 1967): 463-495.

The purpose of this paper is to look at the United States Army and American society through Army posts. The forts and camps of the Army have been with us throughout the nation's history. They are the most visible work of the Army, and they provide physical evidence of how one part of American society manipulated geography to meet its needs. They also show how the existing environment helped to shape the Army, and they certainly provide clues about the changing character of the Army, and the society that built it. What physical and human factors led to the establishment of Army posts and their evolution through time? What aspects of American and military society are reflected in Army posts from past to present? How are changes in culture reflected in the organization, architecture, size, and locations of Army posts? These are a few of the questions that will be addressed in this paper.

The Literature and the Resources
The Literature

A great deal of literature exists on the subjects of armies and army posts. As previously mentioned, much of this work has been written in the context of wars. Since the primary purpose of armies is to fight wars, it is inevitable that this would be the case. As far as the author is aware, no geographer has written on the subject of American Army posts as cultural artifacts.

Historians, however, have been much more attentive to military subjects. The history of fortification in Europe, from which America apparently drew its designs, has been documented from the days of Greece and Rome to the present.[1] Additionally, the story of American fortification has been written more than once.[2] Locating and describing the old forts of America, particularly in the Wild West, have been favorite pastimes of amateur and professional historians.[3]

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[1]Two of the better general histories of European fortification are Horst de la Croix, Military Considerations in City Planning (New York: George Braziller, Inc., 1972) and Ian V. Hogg, Fortress: A History of Military Defense (New York: St. Martin's Press, 1975). Other historians discuss fortification in the context of general military history and weapons. See J. F. C. Fuller, Armament and History (London: Eyre and Spotiswoode, 1946) and Lynn Montross, War Through the Ages, 3rd ed. (New York: Harper and Row, 1960).

[2]Histories of American fortification are much more difficult to find than those of Europe. One of the first works that attempted to look at American fortification in general terms was Emmanuel R. Lewis, Seacoast Fortifications of the United States: An Introductory History (Washington, D. C.: Smithsonian Institute Press, 1970). The most recent and most comprehensive work on the subject to date was written by an architect, who traced the architectural ties of America's early forts to their European origins. See Willard Bethurem Robinson, American Forts: Architectural Form and Function (Chicago: University of Illinois, 1977).

[3]American forts, particularly those of the frontier, have been popular subjects for many authors. Most authors have been content to locate and describe such forts. One such work consisted of single-paragraph descriptions of more than 1,200 places that had used the term fort in their names. See Bruce Grant, American Forts, Yesterday and Today (New York: E. P. Dulton and Co., Inc., 1965). A similar work which concentrated on the forts of the Wild West and provided more detailed descriptions and history was Robert W. Frazer, Forts of the West (Norman,

Repositories and Primary Sources

Certainly, the best places to find information on the Army and its posts are in the holdings of the United States government and the Army. The United States Army Engineer Student Library at Fort Belvoir, Virginia is the repository for a great deal of first and second-hand information concerning the subject of fortification. Numerous reports are available at this library from engineer officers who were responsible for building and maintaining America's coastal fortifications under the watchful eyes of Congress.[1] Reports from foreign officials revealed the similarities and differences between the concepts of American and European fortification.[2]

Oklahoma: University of Oklahoma Press, 1963). Francis P. Prucha's Guide to the Military Posts of the United States, 1789-1895 (Madison, Wisconsin: The State Historical Society of Wisconsin, 1964) used Erwin Raisz's map of Landforms of the United States (1957) to locate many posts. It was a valuable source of information for some of the maps in this paper.

A retired Marine and self-proclaimed amateur historian, Herbert M. Hart, has provided some of the richest histories and descriptions of military posts in the trans-Mississippi West. His photographs, sketches, and accounts of more than two hundred military posts to which he travelled were extremely helpful. The four volumes that he has published are listed in the bibliography of this paper.

[1] Two of the more important reports used in this paper were James St. Clair Morton, Memoir on American Fortification (Washington, D. C.: Willian A. Harris, 1859) and Robert T. Lincoln, Secretary of War, Report to Congress by the Secretary of War and the Board of Engineers on the Conditions of Fortifications in the United States in 1881 (Washington, D. C.: U. S. Government Printing Office, 1881).

[2] See James A. Ferguson, An Essay on a Proposed New System of Fortification (London: John Weale, 1849).

A most important repository was found at the United
States Army Military History Institute at Carlisle
Barracks, Pennsylvania, probably one of the best libraries
of military history in the country. Many government
documents, reports, inspections, and surveys were found
here. The sources covered nearly every aspect of the
development of the Army and its posts throughout American
history.[1] Regulations and architectural designs for posts
were found. Annual Reports of the Secretary of War
provided detailed information concerning the issues
surrounding the development of posts. Magazine articles
by Army architects discussed principles of design and
construction that allowed Army posts to fit into the
American cultural scene. Newspaper articles discussed
changes in the Army and subsequent changes in Army posts.

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[1] By far the best sources of information on Army posts
were in the years after the Civil War. Of particular in-
terest were two reports made by the Surgeon General in
1870 and 1875. The medical staff's interest in Army posts
was related to efforts to improve the health of soldiers,
but the information collected by local surgeons was also
extremely interesting in other respects. The reports pro-
vided relatively detailed information on local climates
and on the physical and human landscapes of the areas sur-
rounding Army posts. Last, but certainly not least, the
reports gave descriptions of the posts and the buildings
(often with sketches included). See U. S. War Department,
Office of the Surgeon General, Circular No. 4; A Report
on Barracks and Hospitals with Descriptions of Military
Posts (Washington, D. C.: U. S. Government Printing
Office, 1870). Also see U. S. War Department, Office of
the Surgeon General, Circular No. 8; A Report on the
Hygiene of the United States Army with Descriptions of
Military Posts (Washington, D. C.: U. S. Government
Printing Office, 1875).

A third major repository for material used in this
paper was the National Archives in Washington, D. C. Most
of the plans and photographs of pre-Civil War forts were
found at this location. Trips to various active Army
posts and to several restored forts helped to balance the
information, and they also provided opportunities to take
some of the photographs used in the paper.

Thesis Organization

The subject matter for this paper has been general-
ized into three basic categories: (1) stone and masonry
coastal forts, (2) frontier posts, and (3) modern Army
posts. These categories were chosen on the basis of
structural similarities. Each category developed within
a distinct period of time, and each had a distinct purpose.
With the possible exception of the stone and masonry
forts, none of the styles developed without some in-
fluence from the other styles. The evolution of one form
always overlapped the other forms, and the designs of
earlier posts played important roles in the designs of
later posts. As cultural artifacts, each category rep-
resented the ideas of the people who planned them, de-
signed them, and built them.[1]

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[1]Due to the very large amount of material available,
the scope of this thesis has been limited to the area of
the United States comprising the forty-eight contiguous
states.

The stone and masonry fort is treated in Chapter II.
It came from Europe, and throughout its existence has
represented the close ties between European and American
culture. Chapter III considers the frontier Army post.
This style had its beginnings in America in the same
European traditions as the stone and masonry fort, but it
diverged from the stone and masonry fort, because it
served a different purpose in different environments
(Robinson, 1977, 133). The sprawling, modern Army post
with which most Americans are familiar is analyzed in
Chapter IV. This style did not become prominent until
the end of America's frontier and the emergence of the
nation into international politics. Some final thoughts
and conclusions for the thesis are presented in Chapter V.

CHAPTER II

STONE AND MASONRY COASTAL FORTS

Legacies of Europe

America and Americans have long been curiosities to
the world's scholars, particularly Europeans. They have
been recognized as being very different from any nations
or people who previously existed, despite their distinctly
European origins. Writing to a gentleman in England
before the American Revolution, Crèvecoeur addressed the
question, "What then is the American, this new man?"
(Crèvecoeur, reprinted 1962, 43). Tocqueville looked to
the United States in the nineteenth century as the shining
example for France to follow in "the irresistible and
universal spread of democracy throughout the world"
(Tocqueville, 1969, xiii). Certainly, Americans have
long recognized and been proud of the idea that they were
different from their European ancestors.

Paradoxically, the story of the stone and masonry
fort in America does not support the idea that Americans
were independent from Europe even after the Revolution.
While the United States may have broken from European
tradition to create a new political and social system,
it departed very little from the European principles

of design and employment of stone and masonry forts
until after the American Civil War.[1] The use of such
forts for coastal defenses was practiced in England before
the first colonies were planted on American soil, while
overwhelming evidence points to France as the primary
source of architectural designs. England also copied
the military architecture of continental Europe (Hogg,
1975, 44), and perhaps it was this dependence that turned
America in that direction. In any event America quite
naturally turned toward France for military architecture
because of the ties that developed from French allegiance
during the American Revolution, and because fortification
had become an exact mathematical science during America's
formative years. Few people felt that it could be im-
proved upon. Louis XIV's France was the center of the
world's scientific community in the seventeenth century,
and her chief military engineer was the recognized expert
on fortification (Hogg, 1975, 49). It was only natural
that Americans copied the best of European technology in
order to defend their newly won freedom.

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[1]Many of the original ideas concerning democracy
also came from European writers, such as Montesquieu and
Rousseau. The idea of American independence and indi-
viduality can be, and has been, challenged in many other
areas. Why do Americans continue to build houses that
look like English country homes? Why are French fashions,
perfumes, and wine still the rage for many Americans?
Why do we import German beer, when more than enough good
beer can be brewed in this country?

The Renaissance and Modern Fortification

Inventions and ideas that derived from the late
Middle Ages and the Renaissance profoundly affected
society in general and warfare and military technology
in particular.[1] The introduction of gunpowder, standing
armies, and the powerful nation-state launched a revolu-
tion in warfare. Along with the Renaissance in scientific
thought and invention came a revolution in weapons and
fortification that set the stage for great fortresses
which spread over Europe, and whose design eventually
came to America. New forms of artillery were especially
revolutionary.

By the end of the fifteenth century it was clear
that no wall made only of stone or masonry could with-
stand repeated bombardments from recently introduced
artillery weapons. Such weapons were able to fire pro-
jectiles more rapidly and at greater distances and veloci-
ties than the catapults which had changed little since
the days of glory in Greece. Particularly important was
the introduction of iron shot in place of the less compact
and more brittle stones. Iron shot had much more penetrat-
ing power than stone, which normally shattered against

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[1] For a thought-provoking look at the Renaissance and
the roles that Renaissance ideas played in modern society
see Crane Brinton, Ideas and Men; The Story of Western
Thought (New York: Prentice-Hall, Inc., 1950), pp. 256-
362. A look at the Renaissance from a purely military
standpoint is provided in Lynn Montross, War Through
the Ages, 3rd ed., (New York: Harper and Row, 1960),
pp. 199-293.

fortress walls. Castles and walls in Italy, including
the Great Aurelian Wall of Rome, crumbled or surrendered
under the artillery bombardments of King Charles VIII's
invading army in 1494. Italy became the first victim
of the new standing armies of France (Montross, 1960,
205). Significantly, the new revolution in fortification
and many new ideas of the Renaissance came to Europe from
defeated Italy, just as many original ideas had come from
powerful Rome centuries before the Renaissance. Silhou-
ettes of walls became lower and were obscured behind wide
and deep ditches to present smaller targets to the artil-
lery. Stone and masonry walls were hidden behind the
ditches and artificially sloped glacis and were backed
by thick earthen parapets to help withstand the impact
of cannon balls and provide platforms for the defenders.
Cannons and muskets were massed to provide deadly enfi-
lading fire against the ranks of soldiers trying to scale
the walls. What became known as the Italian System of
fortification also produced the triangular bastion, so
that a larger volume of guns could concentrate fire at
one point and protect the flanks of neighboring bastions
(see figure 3) (de la Croix, 1972, 39-42).

Preeminence of French Fortification

By the sixteenth century the art of fortification
had matured into something approaching an exact science.
Fortresses were built in precise geometric forms using

Bastions

Curtain

Glacis

Outer
Wall

Gun
Platforms

Interior
of Fort

Ditch
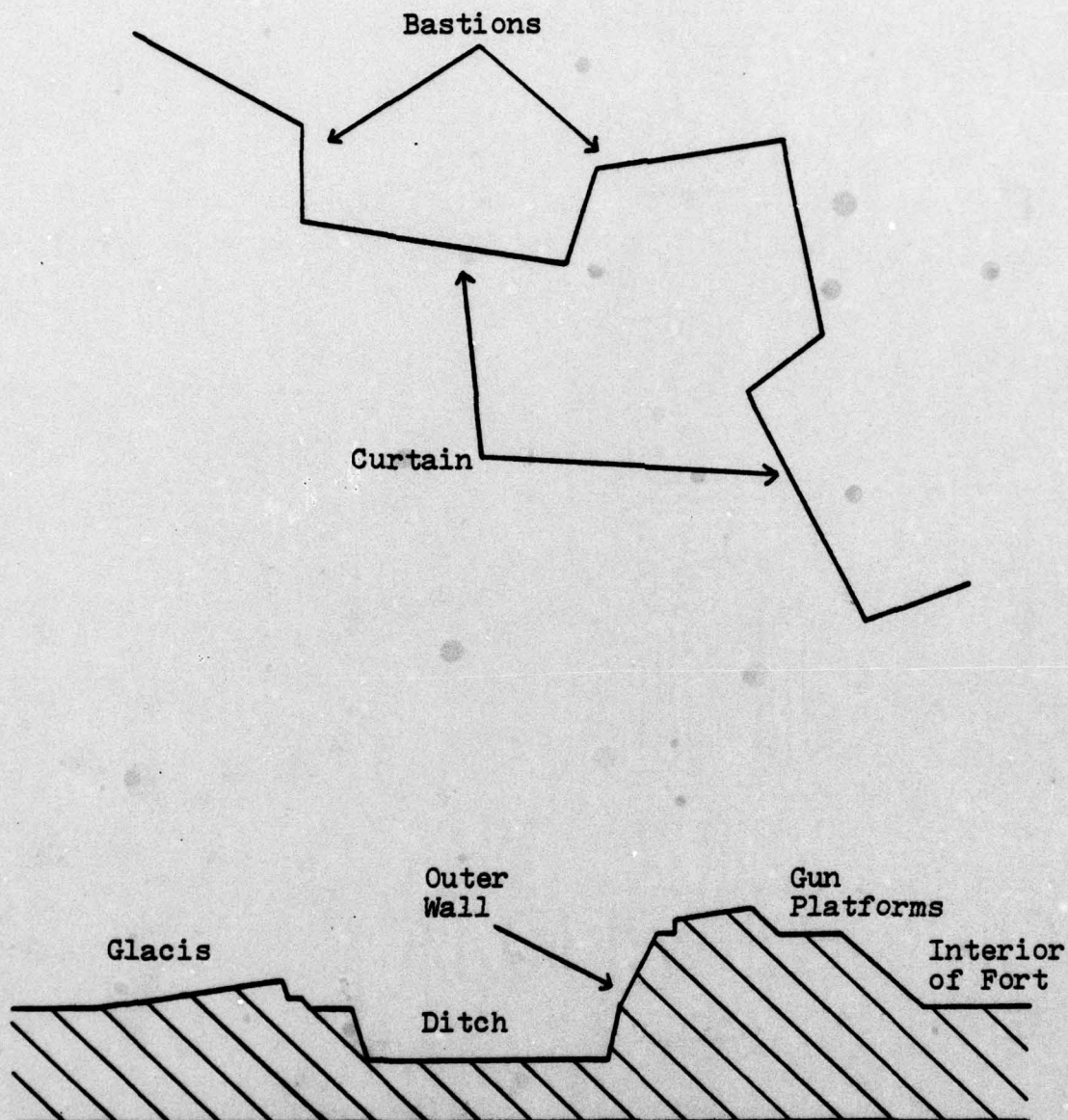
Figure 3.   Basic Elements of Renaissance Fortification.
The triangular bastion (top, as seen from
above) provided good coverage of the curtain
and neighboring bastions. A cross section of
a simple fortification reveals why the Italian
System and later versions were so formidable.

SOURCE: Sébastien le Prestre de Vauban,
A Manual of Siegecraft and Fortification,
trans. George A. Rothrock (Ann Arbor, Mich.:
University of Michigan Press, 1968), p. 17.

mathematical formulae. Military engineers were held in high esteem by governments whose domains depended largely upon military power. The importance of military planning overrode the economic and social needs of a city's population, and many cities were purposely restricted in size so they could be adequately fortified. The pentagon became somewhat of a standard shape for fortresses throughout much of Europe in the late sixteenth century, and the science of military engineering was rapidly becoming dogma (de la Croix, 1972, 50).

During the reign of Louis XIV in the latter half of the seventeenth century, France grew to dominate continental Europe. At least part of the credit for this dominance must be given to Sébastien le Prestre de Vauban, Louis XIV's military engineer. Vauban revived the art of siegecraft used by Julius Caesar and improved upon it. He also brought together the techniques and innovations of fortress building, which had grown largely out of the Italian System, and he developed a system of fortification that remained the world's model until about 1870 (Hogg, 1975, 68).

Briefly stated, Vauban's system of fortification was based upon a regular polygon established around the area to be defended. The length of each side of the polygon depended upon the effective range of infantry

weapons.[1] At each corner of the polygon a triangular
bastion was built, so that each bastion could cover the
straight section of wall between bastions and the flanks
of neighboring bastions. The entire wall was then sur-
rounded by a wide ditch (filled with water or dry) to
produce a no-man's land for attacking soldiers. From
this point Vauban built outward from the main wall,
establishing additional triangular earthworks and earth-
works of irregular shape into an ever widening system
of mutually supporting positions and trenches, so that
an attacking enemy would be channeled into the face of
the fort's guns wherever he turned (see figures 4 and 5).
Throughout his career Vauban fortified an estimated 150
places, and most military engineers of later years,
including Americans, faithfully copied his principles
(Hogg, 1975, 49-65).

The degree to which Vauban influenced European
fortification can be seen in the comments that his work
provoked. Even criticism can be a form of praise, and
as late as 1907 Vauban's system of fortification was

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[1]The effective range of a weapon is the range that
it can be fired with consistent accuracy. With infantry
weapons it is the distance the soldier can hit the target
while aiming directly at it. Smoothbore muskets of the
period limited the length of wall between bastions to
approximately 150 feet.
Vauban is usually credited with three separate
systems of fortification. Actually, the second and third
systems were no more than variations of the first system
to fit specific situations (Hogg, 1975, 64).
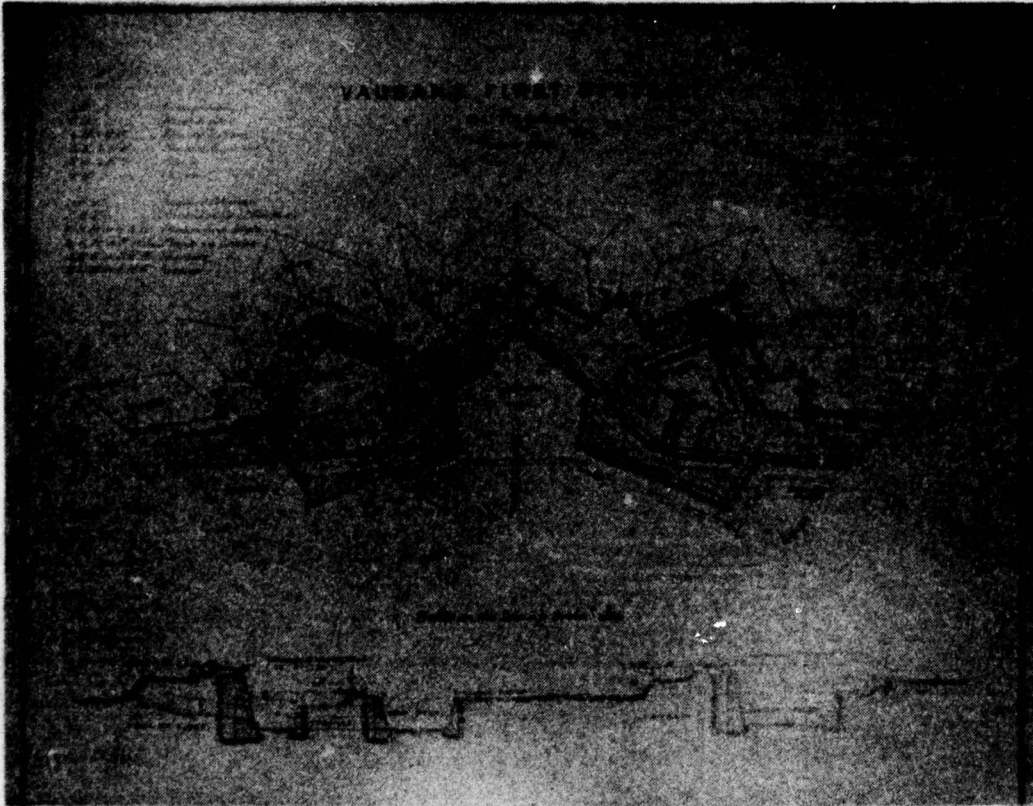
Figure 4.   Vauban's First System of Fortification. The
             complexity of fortification in seventeenth-
             century Europe is illustrated by Vauban's
             First System, which served as a basic guide
             to fortification until late in the nineteenth
             century.

             SOURCE: Major G. Philips, Elementary
             Course of Field and Permanent Fortification,
             and the Attack of Fortresses (London: Pardon
             and Son, 1874), Plate 8.
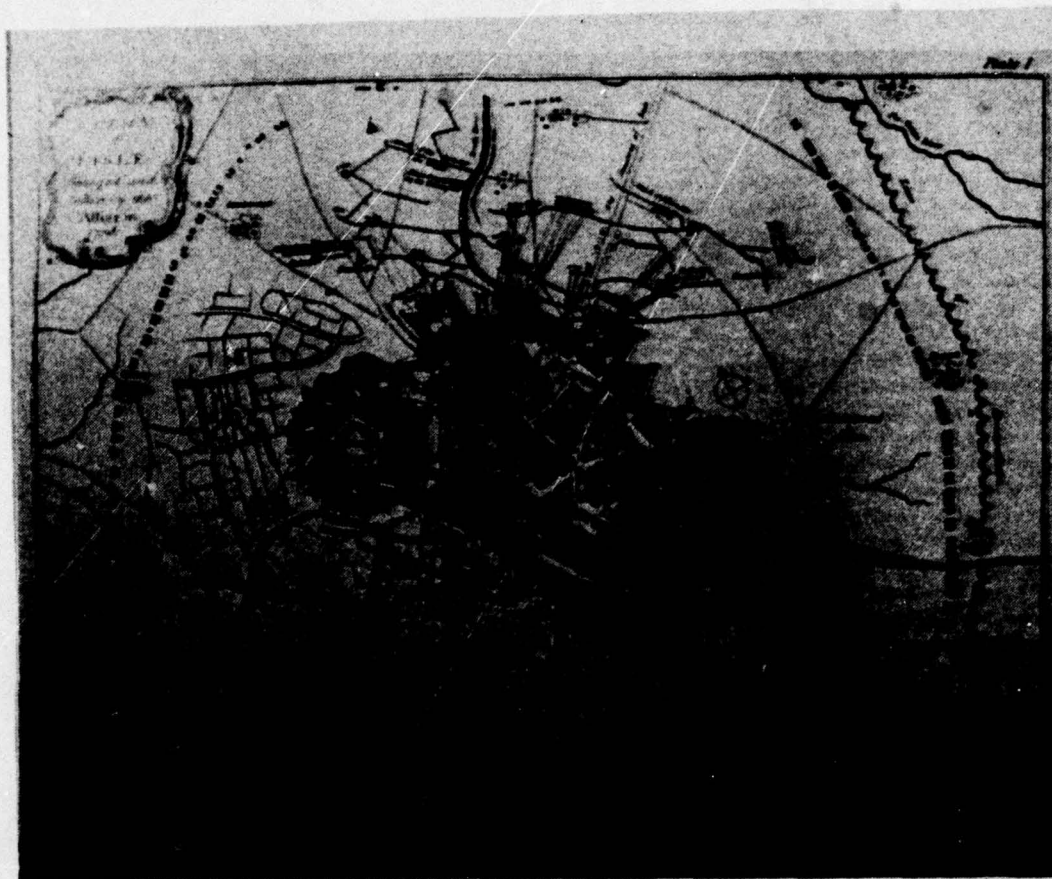
Figure 5.   A Plan of the Fortress of Lisle, France.
A classic example of Vauban's work was this
fortress, which was captured by allied
armies of Europe in 1708. As was usual in
Europe at this time, the entire city was
fortified. The citadel, or last strong-
hold of the fortress, is shown on the left.

SOURCE: Sir George Sydenham Clarke,
Fortification: Its Past Achievement, Recent
Development, and Future Progress (London:
John Murray, Albemarle Street, W., 1907),
Plate I.

criticised in a broad parody by Sir George Sydenham
Clarke:

> Draw a polygon round [sic] the area to be defended;
> make of each side a bastioned front, obtaining salien-
> cy and crossfire over the front by ravelins . . . .
> Supplement this trace by any number of counter-guards,
> place an independent reduit in every possible angle;
> build high caveliers to give simultaneous lines of
> fire; retrench everything retrenchable; throw out
> hornworks, crownworks, tenailles, demi-tenaillons and
> what-not to the front, thus infinitely increasing the
> geometric possibilities; finally build a citadel in
> which most of the above artifices can be repeated
> inside the main line, and one arrives at a fair idea
> of what may be termed the linear method of fortifi-
> cation (Clarke, 1907, 6; quoted in Hogg, 1975, 58).

The Utility of the Stone Fortress

Ironically, Vauban was better known for his method
of siegecraft, which was used by the Japanese as late as
1904 to take Port Arthur from the Russians (Hogg, 1975,
115). By digging parallel and zigzag lines of trenches,
soldiers were able to advance under protection to the
very edge of the fort. Under Vauban's direction the
French army was able to lay siege to and capture any
fortress in Europe. His soldiers even had the dubious
distinction of successfully besieging forts which Vauban
had designed (Hogg, 1975, 49-52). This ability to cap-
ture the most elaborate forts of the period inevitably
cast doubt upon the utility of expending enormous sums
of money for their construction. Yet, such forts
continued to thrive in Europe, and their designs were
imported to America. The arguments against expensive

fortifications spanned Europe and America, and in 1859
a Royal Commission in England was still arguing:

> Very rarely has a fortress absolutely denied
> an invader or attacker his desired course of action;
> more usually its sole use has been to buy time, . .
> . (quoted in Hogg, 1975, 8).

With the enormous costs involved, one may wonder
why any elaborate forts were ever built in Europe, and
why the technology was imported to America. Simply
stated, fortresses were less expensive than standing
armies, and they were less dangerous to established
governments. In essence they were used as substitutes
for large standing armies (Vauban, translated 1968, 11).
Part of the reason for this substitution, at least from
Europe's point of view, may be found in the military
strategy and tactics of Louis XIV's Europe. Following
the close of the Thirty Years War in 1648, Europeans
attempted to retreat from the economic and human waste
of near total war. They did not retreat from the use
of war as an instrument of national policy, as evidenced
by Louis XIV's efforts to expand his empire through war;
however, they did change the strategy of war. Even an
ambitious despot like Louis XIV recognized that a
soldier's life was valuable. The soldier may not have
been valuable as a human being to Louis, but he was
valuable as an investment to the state (Montross, 1960,
313).

This was the era of linear tactics, where opposing

forces stood in long, neat lines and traded volleys at about twenty paces. Needless to say, casualties were very high in battle. It took approximately five years to train and discipline soldiers in linear tactics, and the monarch could ill afford to waste such investments in a few pitched struggles. Something had to be done to preserve human resources and still win wars (Montross, 1960, 321).

Louvois, Louis XIV's war minister, perfected a system of supplying his armies through pre-positioned points distributed along well maintained roads. By introducing this innovation he gave European armies the capability to win campaigns without firing a shot. Armies had grown too large to live by foraging from the land, and Louvois' system was a measure of economy for the state, and it helped to release armies that had previously been dependent on particular provinces for supplies. It also made armies more vulnerable to defeat by making them highly dependent upon relatively fixed supply points and cumbersome supply trains (Montross, 1960, 318-319). Armies moved about the country trying to obtain advantageous positions against their enemies. They could not afford to bypass forts, because supplies were often kept in them, and because garrison forces could cut the supply lines of invading armies once they had passed. Forts were critical elements in the defense of a nation, and

their enormous construction costs were small compared
to the cost of training and maintaining large standing
armies. In one of his own works Vauban referred to this
"war of position" (Vauban, translated 1968, 2) as the most
important element in seventeenth century Europe. Almost
as important to Vauban, and certainly to Louis XIV, was
the fact that fortresses could be manned by forces that
were politically less dangerous to the state than were
well-trained armies. Garrison forces were smaller than
maneuver armies, and they were not trained or disciplined
to the same degree as maneuver armies. If a garrison
rebelled, there was little danger that such a small, ill-
trained force could take over the country (Vauban, trans-
lated 1968, 2-13).

The Fortress as a Symbol

In addition to the reasons stated above, fortresses
were important aspects of long-range governmental policy
and stability, because they were highly visible to the
population of a nation and to the governments of foreign
powers. These massive structures dominated the territory
around them. As symbols of governmental power and national
unity, they served to warn against internal revolt or
external invasion. Instead of sending a large army
through the countryside to illustrate national power,
the government could simply build an imposing fortress
to act as a constant reminder of that power. The status

of a nation in Europe was directly related to military power, and fortresses were symbols of that power. France was the most powerful nation on the Continent, and her fortresses were admired and imitated throughout Europe and later in America.

English Coastal Fortification

Vauban became the world's leading military engineer largely because fortresses were vital to France's survival as a continental power in Europe. France shared long disputed borders with many European countries, and it was with the help of Vauban's fortresses that Louis XIV was able to repel the allied armies of Europe and even expand his domain (Montross, 1960, 335-340). On the other hand, England shared no disputed boundaries on the Continent. She was frequently allied with other European nations against the expansion of France or Spain, but after the Hundred Years War (1337-1453) England never tried to gain a foothold on the Continent. In the long run England could always retreat to her securely delineated islands as the home of Europe's English speaking population.

At least in part because of their physical isolation from the Continent, the English were never known as great fortress builders. England did, however, develop the modern concept of coastal fortification. As early as 1539, King Henry VIII directed the construction of a

system of mutually supporting forts along the English coast. These early forts were based upon the Byzantine method of rounded towers and concentric walls. They were small in comparison to French standards, because they did not enclose entire cities or large troop concentrations. Each fort was largely self-sufficient and was designed to resist attack from land or sea. Their strength came from the fact that any invader would have to come from the sea. Land fire-power was superior to that of wooden ships, and it was expected that coastal forts could resist an invasion long enough for the militia to muster and repulse any elements that had been able to land. In recognition of improved methods in fortress designs, the English imported Italian engineers to redesign Henry's forts before the arrival of the Spanish Armada in 1588. These engineers brought with them the technology used later by Vauban (Hogg, 1975, 31-44).

The parallels between the English concept of coastal defense and the later American use of coastal forts were striking. Both countries were separated from their major enemies by large bodies of water. Both countries utilized militia to support their coastal defenses, and they both depended on continental Europe for the basic designs of their forts. America adopted the militia concept from England with the earliest colonies, as she did several cultural traits. Although

coastal forts did not come into general use in America
until the United States became an independent nation,
it is just as certain that the concept came from England.
The United States became the first nation since England
to launch into a large scale program to build coastal
fortifications (Fieberger, 1916, 45).

Fortification in Colonial America

It is significant that the Thirteen Colonies were
being settled at a time when Vauban reached the height
of his glory in France. It is equally significant that
Great Britain emerged as the world's leading naval power,
and the defense of her homeland relied heavily upon the
navy and coastal fortification. Both factors played
important roles in the evolution of armies and fortifi-
cation in America.

All the major European powers built their colonial
forts in North America using the basic principles of the
French military architects. The Spanish began building
forts in the New World as early as 1519 (Robinson, 1977,
15). The Castillo de San Marcos at Saint Augustine,
Florida was a stone and masonry fort which served as the
main defense for the fortified city and marked the main
line of defenses for Spain's northern frontier. Through-
out many of their colonial adventures in Texas and
California, the Spanish built stone and masonry presidios
to solidify their hold on the territory and to awe the

Indian population with the power of Spain.

Like most forts built in North America by the Europeans, the Castillo de San Marcos was a simplified version of the elaborate works in continental Europe. It was square and had four bastions (one bastion on each corner), and while it had outer earthworks, they were not nearly as elaborate as those built around the fortresses of Europe (Robinson, 1977, 17-23).[1] There was not the need for fortresses on the same magnitude as those in Europe. There were no traditional borders or major cities to defend, nor was it likely that a fort such as the Castillo de San Marcos would be besieged by an army of the same magnitude or staying power as those in Europe.

The French also built stone and masonry forts, beginning as early as 1635 with Fort Pentagoet, Maine (Robinson, 1977, 23). Some of the forts were quite elaborate for a sparsely populated territory. The works at Quebec, Louisburg, and Mobile were of this category. Although the fortifications at New Orleans were never completed, the town was planned in 1716 as a fortified city along the best principles of Vauban (Robinson, 1977, 43). The fortress at Louisburg proved to be a good example of the fortress as a symbol of French power. It

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[1]For an excellent account of military architecture in colonial North America see Robinson, American Forts: Architectural Form and Function, pp. 12-50.

never really commanded much or defended anything of
real value, but it was an object of fear and hatred
among the New England Colonies.[1] In 1745 this "strongest
man-made fortress on the continent" (Montross, 1960, 408)
was captured by a relatively untrained band of 4,000
Boston Colonists, only to be returned to France in a
treaty with England (Montross, 1960, 408). That event
provided some indication of the strategic value of
Louisburg to the English as compared to its symbolic
value for the Colonists.

Befitting their reputation in Europe as great
fortress builders, the French were the most prolific
fort builders in America during the first half of the
eighteenth century. They even built masonry forts deep
in the wilderness, such as at Fort Niagara, New York
(1725) and Fort Chartres, Illinois (1753). Despite such
indications of extravagance, most of the French forts
in North America were temporary works of wood and earth,
and most of them were designed in the same simple square

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[1]Much of America's early history was marked by a
fixation on the forts of the Great Lakes and St. Lawrence
River. Much of this was a reflection of American desires
to annex Canada, but it is interesting that the efforts
to invade Canada were usually made in small uncoordinated
attacks that went directly at such strongholds as
Louisburg, Montreal, and Quebec. They were usually
undertaken at the expense of leaving vulnerable areas
(such as the nation's capital) unprotected. It was as
if the forts were attacked simply because they were
there. See Weigley, History of the United States Army,
pp. 119-122.

pattern as the Spanish forts (see figure 6) (Robinson, 1977, 31-32). For Louis XIV and later kings, the value of North America lay in the fish and fur trade. French forts served to protect the major waterways controlling these resources.

Prior to the American Revolution, however, stone and masonry forts gained little attention in the English colonies. The English were much more serious about settling North America than either the French or Spanish, but they were the least prolific at building permanent fortifications. It was not until the period of the French and Indian War (part of the Seven Years War in Europe) that Great Britain occupied major permanent forts at Crown Point, New York (1759), Fort Ticonderoga (1759), and Fort Pitt, Pennsylvania (1759). The first two were captured from the French, and the third was built on the site of a captured French fort. Frederica and Savannah, Georgia (1736 and 1773, respectively) were planned as fortified cities for protection against Spanish raids from Florida, but these works were never anything more than wood and earth structures, and they provided only temporary protection in a climate that rapidly decayed the wood (Robinson, 1977, 35-43) (see figure 7).

Practically all of the English fortifications in North America were in poor condition by the time of the American Revolution. Fort Ticonderoga was described by one English engineer shortly after its capture as "an

Figure 6.   Fort Duquesne, 1755. While the French built several elaborate stone and masonry forts in North America, most of them were like this simple earth and wood fort on the Ohio River. The square, four-bastioned outline represent-ed a simplification of the architecture used in Europe (Robinson, 1977, 32).

SOURCE: Indian Forts Commission, Commonwealth of Pennsylvania, Report of the Commission to Locate the Sites of the Frontier Forts of Pennsylvania, vol 2 (Harrisburg, Pa: Clarence M. Busch, 1896), p. 39.

Figure 7.   Fort Burd at Brownsville, Pennsylvania, 1759. Very few stone forts were built by the English in colonial North America. This wooden fort was more typical of early forts in the Thirteen Colonies. Most of them guarded the frontier with French North America (Robinson, 1977, 35-39).

SOURCE: Indian Forts Commission, Report of the Commission to Locate the Sites of the Frontier Forts in Pennsylvania, vol. 2, p. 383.

FORT BURD ON REDSTONE.
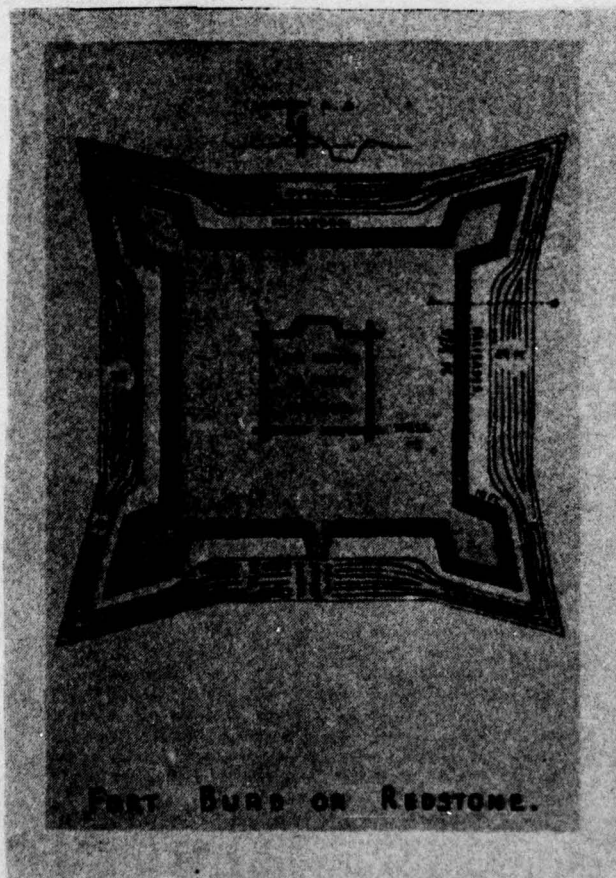
amazing, Useless Mass of Earth" (Ketchum, 1958, 106).
There apparently was some substance to Thomas Jefferson's
complaints in the Declaration of Independence that England
had left the Colonies unprotected (see Chapter I, page 9).

The reasons for English laxity toward fortification
in the Thirteen Colonies can probably be traced to
several causes. Failure to fortify the American coast
(the English coast had been successfully defended in
this manner) may possibly be attributed to the magnitude
of such an undertaking, or it may have been simply
because coastal forts (or any other permanent forts)
were unnecessary in the Colonies. By the time France
reached her peak of strength under Louis XIV, England
was largely in control of the seas and feared little
from a French invasion of the Colonies. It would have
been possible for England to cut the supply and rein-
forcement lines of an invading French army with her
navy. Besides, France was heavily engaged in almost
constant war with a coalition of European armies on the
Continent and could ill afford a large venture in North
America. Spain's power was on the decline by the
seventeenth century, and perhaps Great Britain felt
her sea power could control any Spanish aggression.
Also, Georgia served as a buffer between Spanish
Florida and the more prosperous colonies to the north.
Great Britain, like the other European powers, expected
her colonies to supplement the treasury. To expend

large sums of money to fortify them would have made the
maintenance of the Colonies less profitable to the
Crown. Great Britain was also involved in the wars
in Europe, and to spend money on fortification in the
Colonies would have diverted funds from the major
theatre of war.

Nor did the Colonists make much effort to build
permanent fortifications. Most of them were untrained
in military affairs, and they were largely anti-military
in disposition (Robinson, 1977, 35). The Dutch built
a few forts to protect their interests in New York, but
they played an insignificant role once England obtained
control of the settlement (Grant, 1965, 13). Virginia
appropriated some funds for fortification in 1755, but
these forts were mostly wood and earth like those of the
English (Robinson, 1977, 35). Even the numerous forts
built during the Revolution were mostly temporary in
nature and simple in design, although the works at West
Point were a notable exception. Only the northern
Colonies, particularly Massachusetts, showed any real
interest in building permanent fortifications. One such
fort was Castle William, built as a stone fort in 1674
in Boston Harbor. It was renamed Fort Independence
after the Revolution (U. S. Army Military History
Institute, unpublished letter, 1943).

The original settlements of Pennsylvania and
Virginia were far removed from the hostilities of New

France. William Penn dispatched succeeding generations
of German and Scotch-Irish immigrants into the frontier
to act as buffers against the Indians (Furnas, 1969, 92).
In addition to their pacifist leanings, the Quakers
showed little interest in the plight of such frontiers-
men. Much the same situation occurred in Virginia, and
former indentured servants moved to the frontier to
settle new lands. There was little need for permanent
forts on such an expanding frontier, and colonial leaders
continued to look to the British navy for protection of
the coast. It was small wonder that no serious thought
was given to permanent fortification, until after the
United States had won its freedom. Not only did America
no longer have the British navy for protection, but
Great Britain was now only one of many potential enemies
from Europe.

Fortification in the United States
Significance of the Coastal Defenses

The United States Congress passed the first appro-
priation for coastal fortification in 1794. It was an
act that launched the nation on a career of preoccupation
with coastal defenses that was to last until World War
II. Only twice during this period, during the War of
1812 and the Civil War, were America's coastal defenses
tested in battle. In one case they proved inadequate to
keep the British invaders from rampaging the capital,

and in the other case they proved to be obsolete.

The significance of America's coastal defenses obviously did not lie in any proven capability to keep invaders from her shores. What was more significant about the forts was what they showed about the American people, their government, and their Army. One year after Great Britain declared war in 1793 on Napoleon's France, Congress passed the Neutrality Act, which governed America's policies toward Europe until World War II. Americans were determined not to become involved in the political complications and almost continuous wars that plagued Europe. In part this was a reflection of political, economic, and military weakness in the young Republic. It was also a reflection of the physical isolation from Europe that made Americans feel that the affairs of Europe did not involve them. This isolation existed long after the United States was firmly established. It was expressed in the terms of the Monroe Doctrine, which stated that Europe should stay out of America's affairs, as well as America staying out of Europe's affairs. One of the early expressions of this doctrine was made by Thomas Jefferson in 1813:

> America has a hemisphere to itself . . . .
> . . . The insular state in which nature has placed
> the American continent should so far avail it that
> no spark of war kindled in the other quarters of
> the globe should be wafted across the wide oceans
> which separate us from them. And it will be so
> (quoted in Adler, vol. 4, 1968, 340).

America's coastal defenses were another expression
of that isolation from Europe. The stone and masonry
forts which concentrated on the Atlantic and Gulf coasts
served as a symbolic wall to shut out the political and
military problems of Europe (see maps 1 through 18).

Ironically, the wall used to shut Europe out of
America was designed largely by Europeans. European
engineers had been recruited during the Revolution by
Silas Deane and Benjamin Franklin (Robinson, 1977, 51).
Jonathan Williams, the first superintendent at America's
engineering school at West Point, studied fortification
in France with Benjamin Franklin and brought French
designs to the United States (Robinson, 1977, 74). Simon
Bernard, who had been Napoleon's military engineer, was
invited by President Monroe to help design coastal
defenses after the War of 1812. Only Joseph Totten,
who worked with Bernard, was generally well known as an
American military engineer, and he was also dependent on
French methods of fortification (Robinson, 1977, 86).
Although the concept of coastal fortification came to
America from England, apparently the English were not
instrumental in helping the United States design her
system.

The willingness of Americans to expend huge sums
of money to erect fortifications reflected their desire
to make the militia system work and keep the size of the

Map 1. Active Army Posts in the United States in 1790. In 1790 the United States had no coastal defense program. The few active posts of the period marked the very early development of a frontier Army (Chapter III). Most of the activity was in the Ohio Valley, where the threat of a British-Indian alliance was greatest, and where settlement was most aggressive.

SOURCES: Clifford L. Lord and Elizabeth H. Lord, Historical Atlas of the United States (New York: Henry Holt and Company, 1953), p. 46. Francis P. Prucha, Guide to the Military Posts of the United States, 1789-1895 (Madison, Wisc.: The State Historical Society of Wisconsin, 1964), plates 14-20. Willard Bethurem Robinson, American Forts: Architectural Form and Function (Chicago: University of Illinois Press, 1977), pp. 133-140.

NOTE: Maps 1 through 18 are referenced throughout this paper. They have been placed together to provide better continuity, and because stone and masonry forts appear on every map except the first one. Most of the locational data for the period 1790-1880 was derived from Prucha (1964). Beginning in about 1890 the War Department published detailed lists of active posts, and that data was used through 1940. The maps for 1960 and 1978 were drawn using data from unofficial sources of the Army Times Publishing Company. Information concerning the major structural categories of the posts was drawn primarily from sources of the U.S. War Department and descriptions contained in Robinson (1977). It is important to recognize that these maps represent static pictures of the distribution of Army posts at various dates. Since many posts existed for only short periods of time and did not overlap decades, the posts on these maps represent only a large sample. They do not show all Army posts that ever existed. Only major posts have been shown in an effort to illustrate the general distribution of troops and headquarters. Sub-posts are not shown, nor are posts that served primarily as arsenals, storage depots, etc. Due to the large amounts of data available, it is possible that some mistakes have been made. The most likely area of mistakes would be in the designation of structural types. Only those posts that were specifically described as stone and masonry forts have been designated as such on these maps; therefore, any errors are likely to be errors of omission.

53

ACTIVE ARMY POSTS IN THE UNITED STATES
1790

- **Army Posts**

  settled

  The Frontier (≥ 2 persons per sq. mi.)

  not settled

  NOTE: Posts are numbered to correspond with Appendixes 1 and 2.

500

0

Miles
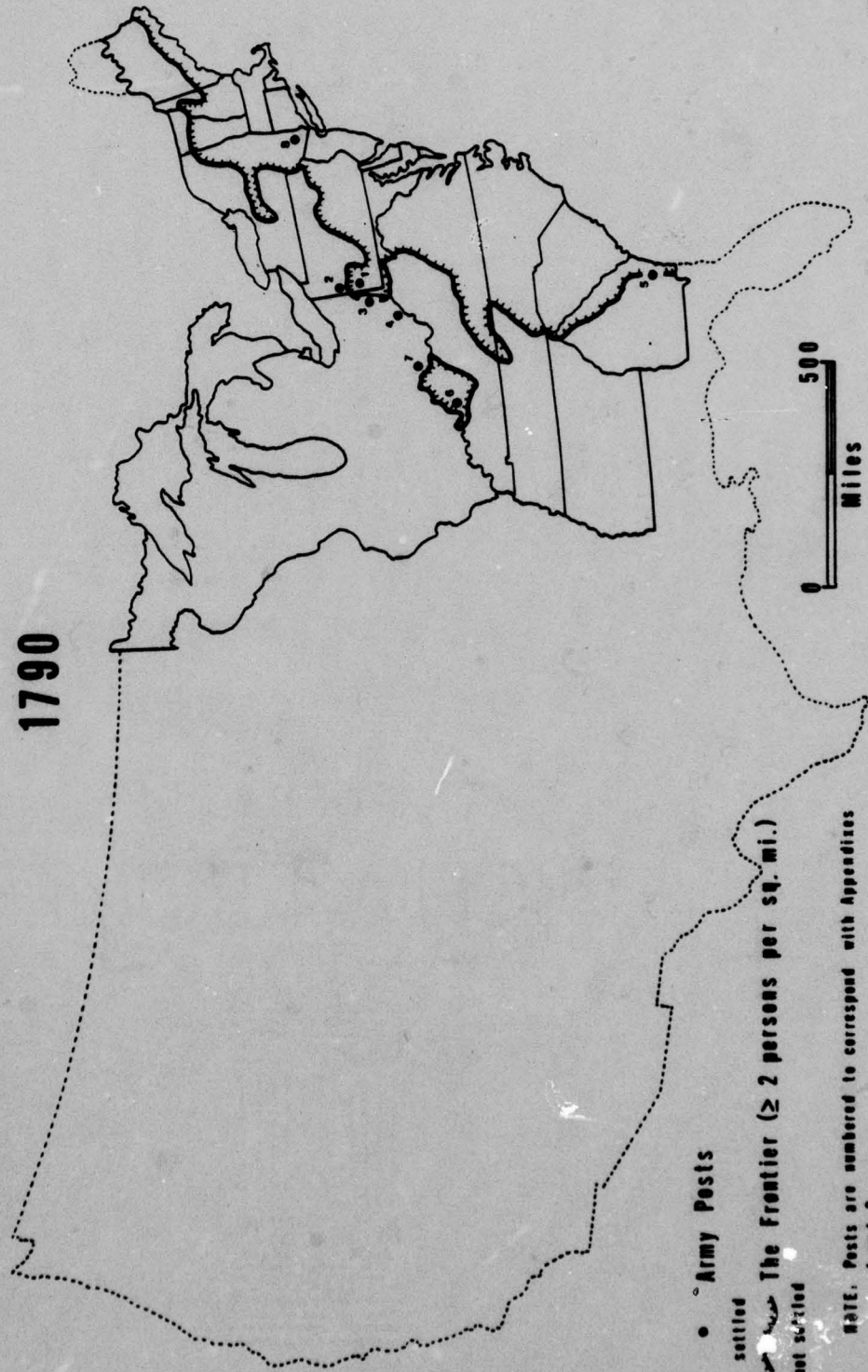
Map 2.   Active Army Posts in the United States in 1800. Congressional
         appropriations in 1794 marked the beginning of a coastal defense
         program for the United States. By 1800 fewer than half of the
         authorized forts had been built. Forts Ontario and Niagara (#27
         and #28) were obtained by treaty from Great Britain. The coastal
         forts shown here largely comprised America's "first system" (Robinson,
         1977, 85) of fortification.

         The westward expansion of the population and the isolation of
         the frontier Army were noticeable. Indian resistance in the Ohio
         Valley and the Old Northwest Territory was still strong, despite the
         victory of Mad Anthony Wayne at the Battle of Fallen Timbers in 1794
         (Billington, 1967, 226). Expansion into this region was slower than
         in the Southwest, and two posts of the previous decade were still
         in existence in the Ohio Valley. Only Fort Wayne (#14) was located
         deep in Indian territory in the Northwest. Most Army posts were
         located along major rivers and beyond the frontier (see Chapter III).

         SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord
         and Lord, Historical Atlas of the United States, p. 46. Robinson,
         American Forts: Architectural Form and Function, pp. 63-85. U. S. War
         Department, Office of the Surgeon General, Circular No. 4: A Report
         on Barracks and Hospitals with Descriptions of Military Posts (Washington,
         D. C.: U. S. Government Printing Office, 1870), pp. 3-109.

ACTIVE ARMY POSTS IN THE UNITED STATES
1800

○ Stone and Masonry Forts

● Other Posts

The Frontier (≥ 2 persons per sq. mi.)
settled
not settled

NOTE: Posts appearing for the first time are numbered to
correspond with Appendices 1 and 2.

Miles
0   500
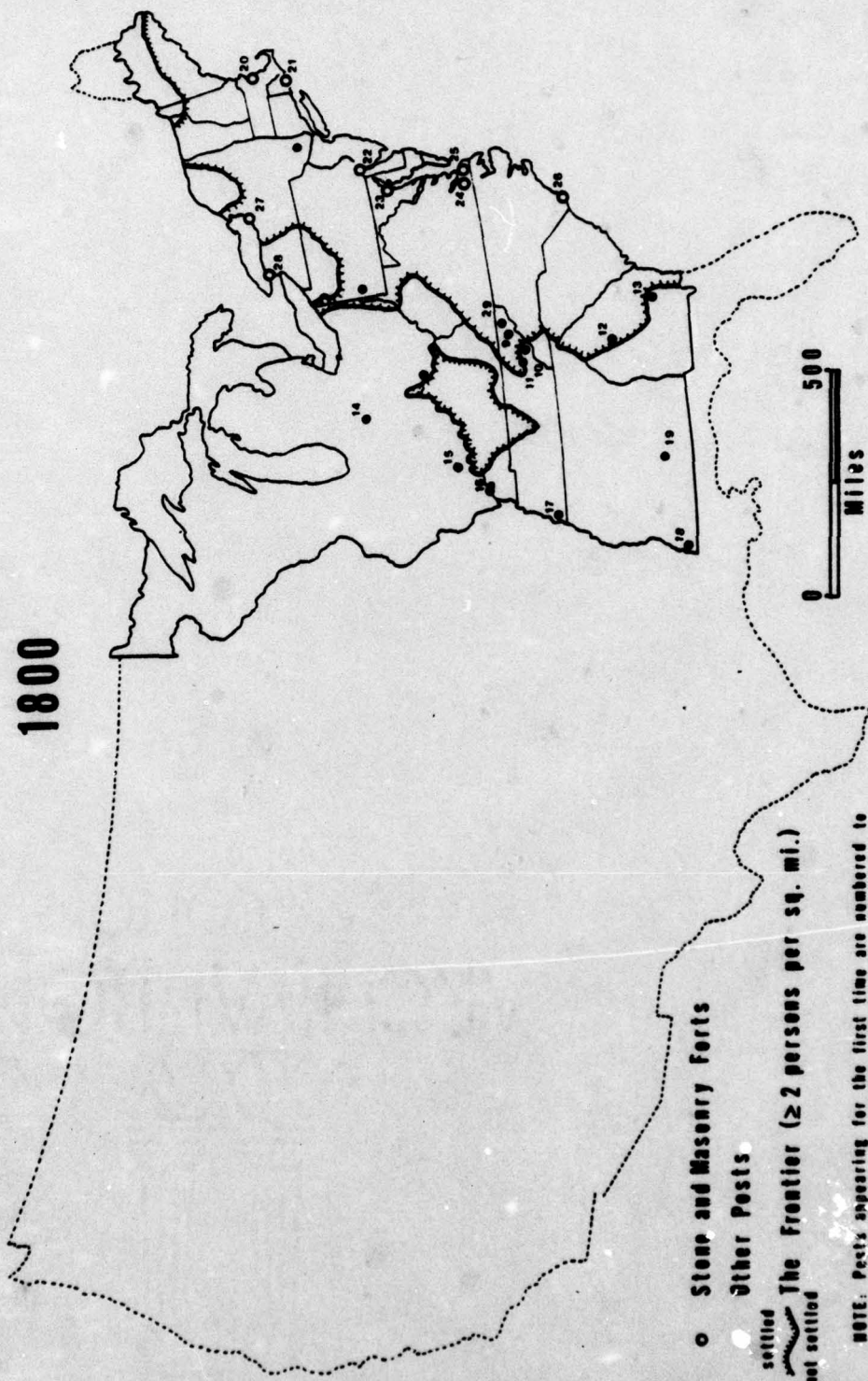
Map 3. Active Army Posts in the United States in 1810. Increased tensions with Great Britain provoked expansion of America's coastal defenses toward the end of the decade before 1810. The second system of fortification was marked largely by star forts in the style of Fort McHenry, Maryland (#23). Obviously, the Atlantic coast from Virginia to the north was the region of most concern to the government. The addition of New Orleans provided another major port to defend, and work began there almost immediately with the addition of Fort St. Philip (#32).

The Louisiana Territory greatly expanded the area of the United States, and the Army wasted little time moving into the unsettled regions. The increased pressure of white settlements and the presence of the Army in the Northwest Territory pushed Tecumseh and his Indian followers into an alliance with the British. New Orleans provided another node of settlement from which the frontier could expand, while conflicts with Spanish Florida provided further impetus for the location of Army posts in that region.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 47. Robinson, American Forts: Architectural Form and Function, pp. 80-85. Surgeon General, Circular No. 4, pp. 3-159.

ACTIVE ARMY POSTS IN THE UNITED STATES
1810
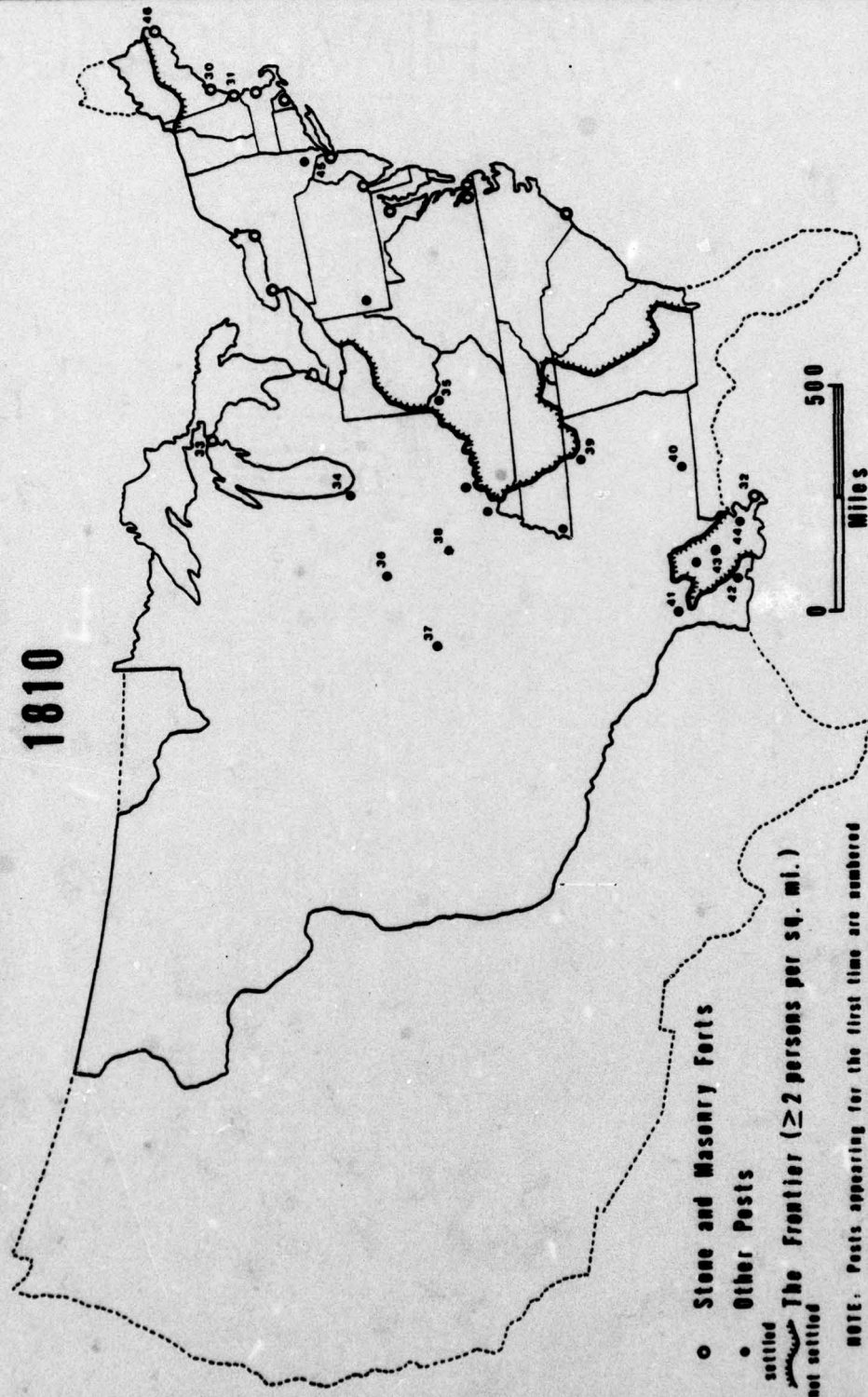
○ Stone and Masonry Forts

● Other Posts

settled
not settled — The Frontier (≥2 persons per sq. mi.)

NOTE: Posts appearing for the first time are numbered
to correspond with Appendices 1 and 2.

Miles
0   500

DWR

Map 4. Active Army Posts in the United States in 1820. The War of 1812 brought embarrassment to the nation. Not only was the capitol burned, but several attempts to conquer Canada met with failure. Reaction to the war was one of intense nationalism and determination to strengthen the nation's defenses (Weigley, 1967, 132). Increased isolation from Europe was the principal meaning of the Monroe Doctrine. America's third system of fortification was launched after the war, and a substantial wall of stone and masonry began to develop along the coast. Paradoxically, one of the principal designers of the new fortifications was a European. Simon Bernard, Napoleon's former chief engineer, was invited by President Monroe to work with Joseph Totten. The system they devised was meant to be built over a long period of time, and it was designed to support the nation's militia tradition (Robinson, 1977, 86-88). The plans of Bernard and Totten largely determined the distribution of coastal fortifications in the United States until after the Civil War.

Another effect of the War of 1812 was to end major Indian resistance east of the Mississippi River (except the Seminoles). Still another effect was to strengthen the isolation of the Regular Army. The concentration of posts in the deep South reflected the growing ambitions toward Spanish Florida. Further west the Army moved well ahead of the frontier and reached the edge of the Great Plains. The role of the Army as an instrument of Manifest Destiny was clear.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 48. Surgeon General, Circular No. 4, pp. 3-174. Robinson, American Forts; Architectural Form and Function, pp. 86-107.

ACTIVE ARMY POSTS IN THE UNITED STATES
1820

Stone and Masonry Forts
Other Posts

settled
not settled The Frontier (≥2 persons per sq. mi.)

NOTE: Posts appearing for the first time are numbered
to correspond with Appendices 1 and 2.

Miles

0   500

Map 5. Active Army Posts in the United States in 1830. Along the Atlantic and Gulf coasts, the growing effects of the system of fortification devised by Bernard and Totten were evident. The Northeast was still the most heavily defended, while the less populated Southeast was the least defended. In most of the larger ports and harbors more than one fort existed to provide mutual defense. Some of the larger forts commanded smaller sub-posts in the harbors (particularly in the Northeast), so not all stone and masonry forts are evident in this map or later maps. For instance, by 1880 New York Harbor was defended by more than eight positions. Only the major forts have been shown.

By 1830 the evolution of the permanent Indian frontier (Chapter III) along the edge of the Great Plains was evident. A chain of forts had formed along the edge of what many people considered unhabitable wastelands to the west. With the exception of a few long-term posts east of the Mississippi River, most interior Army posts still reflected the role of the Army as a buffer between the white settlements and the unconquered Indian population. Some posts of the permanent Indian frontier had already been in existence for more than ten years, and the frontier was rapidly approaching them from the east.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 49. Surgeon General, Circular No. 4, pp. 3-271.

NOTE: On this and later maps the congestion of stone and masonry forts becomes such that their true locations cannot be indicated in some instances. For example, some forts may appear to be in upper New Jersey. They are actually located in New York Harbor.

ACTIVE ARMY POSTS IN THE UNITED STATES
1830

Legend:
- ○ Stone and Masonry Forts
- • Other Posts
- The Frontier (≥ 2 persons per sq. mi.)
  - settled
  - not settled

NOTE: Posts appearing for the first time are numbered to correspond with Appendices 1 and 2.

Miles
0 ——— 500
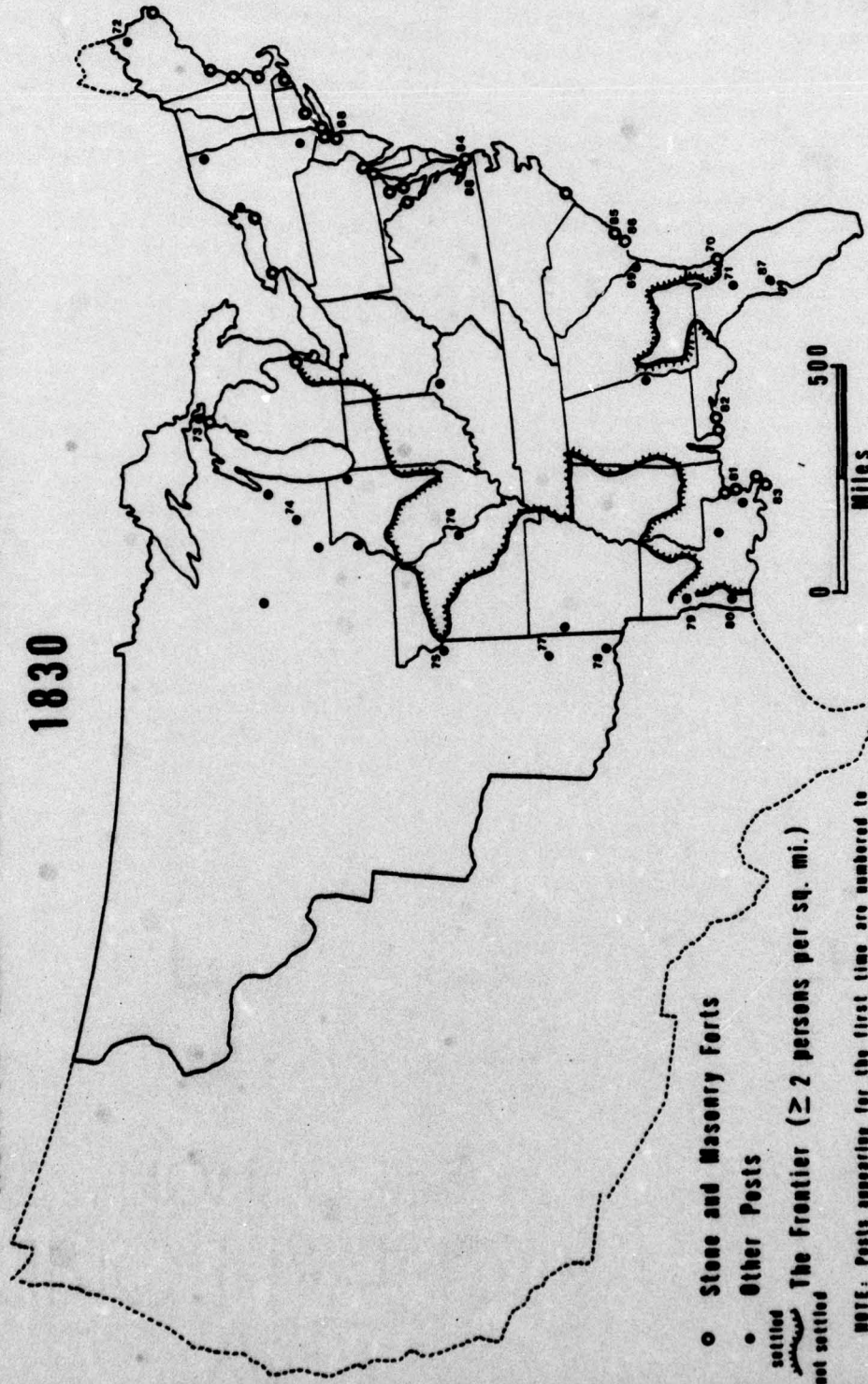
Map 6. Active Army Posts in the United States in 1840. The decade leading up to 1840 saw the continued expansion of America's coastal defense system. Most of the new coastal forts were in the southern states, which had been somewhat neglected in earlier years in favor of more populated regions to the north. Most, but not all, of the forts in the South were of the second priority described by Bernard and Totten. Disputes concerning the high costs of the system had also begun to surface by this time, and the expansion of the forts slowed in comparison to previous decades.

On the frontier (Chapter III) the effects of the Great Plains barrier and the permanent Indian frontier were striking. In the extreme south the Republic of Texas formed in 1836 provided one barrier to the expansion of the frontier (the barrier was more official than actual). At the western edge of Missouri and Arkansas the frontier pushed against the boundaries of Indian Territory. In the north the Great Plains extended farther to the east and helped to slow expansion in that region. The major job of the Army at this time was to keep white settlers out of the Indian Territory and preserve peace among the various tribes that had been evacuated from the East. Contact with the mounted Plains Indians was becoming increasingly hostile (particularly in Texas, where the United States had no jurisdiction). To cope with the mobility of the Plains Indians the Army formed its first regiment of mounted soldiers (1st Dragoons) in 1833 (Weigley, 1967, 159).

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 50. Robinson, American Forts: Architectural Form and Function, 107-115. Surgeon General, Circular No. 4, pp. 3-271.

ACTIVE ARMY POSTS IN THE UNITED STATES
1840

Stone and Masonry Forts
Other Posts

settled
The Frontier (≥ 2 persons per sq. mi.)
not settled

NOTE: Posts appearing for the first time are numbered to
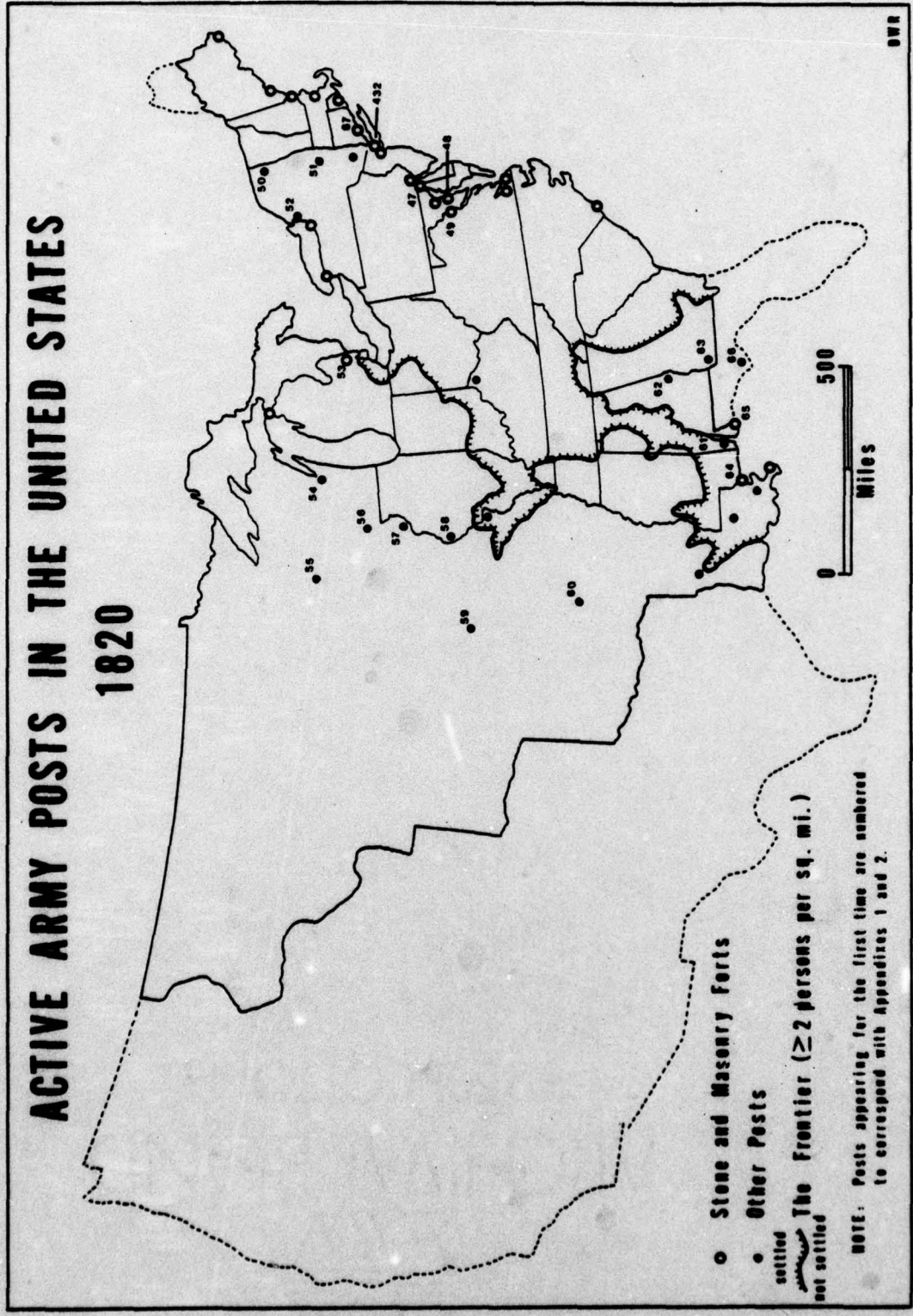correspond with Appendices 1 and 2.

Miles
0   500

63

DWR
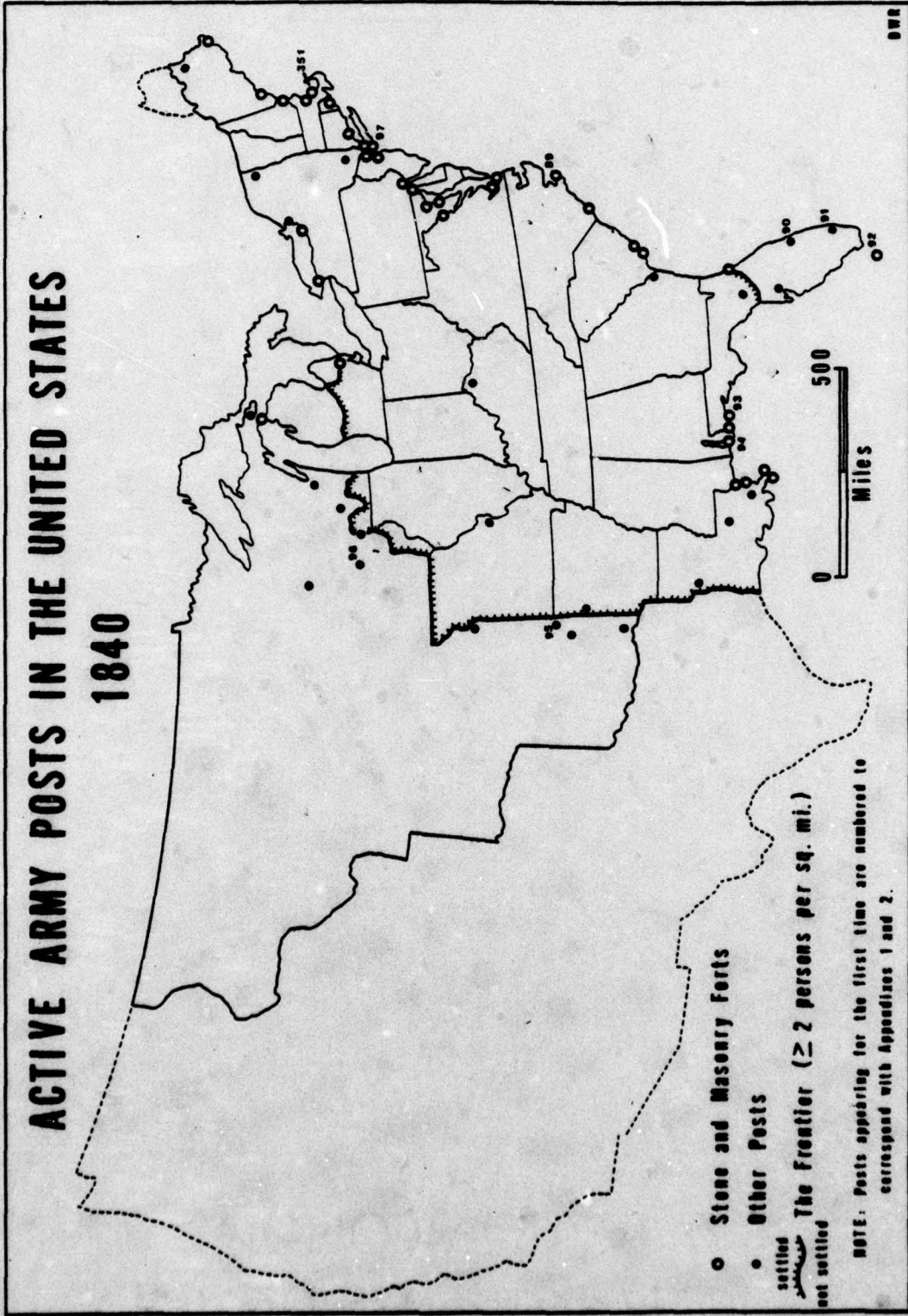
Map 7. Active Army Posts in the United States in 1850. By 1850 the growth of coastal fortifications had slowed considerably. Doubts concerning the utility of stone and masonry forts had grown stronger; furthemore, the system was reaching maturity in its second phase planned by Bernard and Totten.

The most conspicuous feature of this map was the explosion of posts in the West. The end of the war with Mexico brought significant changes to the frontier. Texas was admitted to the Union in 1845, and that artificial barrier was removed. Population spread across the Southwest into the Rio Grande Valley and to California. Many of the Army posts in the Southwest were products of the recent war, but many more were products of major conflicts with the Indians of the Southern Plains. Further north the Army established posts for the protection of settlers moving along the Oregon Trail and into the Northern Plains. The permanent Indian frontier had been broken, but the barrier of Indian Territory in present day Oklahoma was still apparent.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 51. Surgeon General, Circular No. 4, pp. 162-290. U. S. Department of the Interior, National Park Service, Soldier and Brave: Indian and Military Affairs in the Trans-Mississippi West, Including a Guide to Historical Sites and Landmarks, with an Introduction by Ray Allen Billington (New York; Harper and Row, 1963), p. 12.

ACTIVE ARMY POSTS IN THE UNITED STATES
1850

○ Stone and Masonry Forts

● Other Posts

settled
•••• The Frontier (≥ 2 persons per sq. mi.)
not settled

NOTE: Posts appearing for the first time are numbered to
correspond with Appendices 1 and 2.

Miles
0 ——— 500
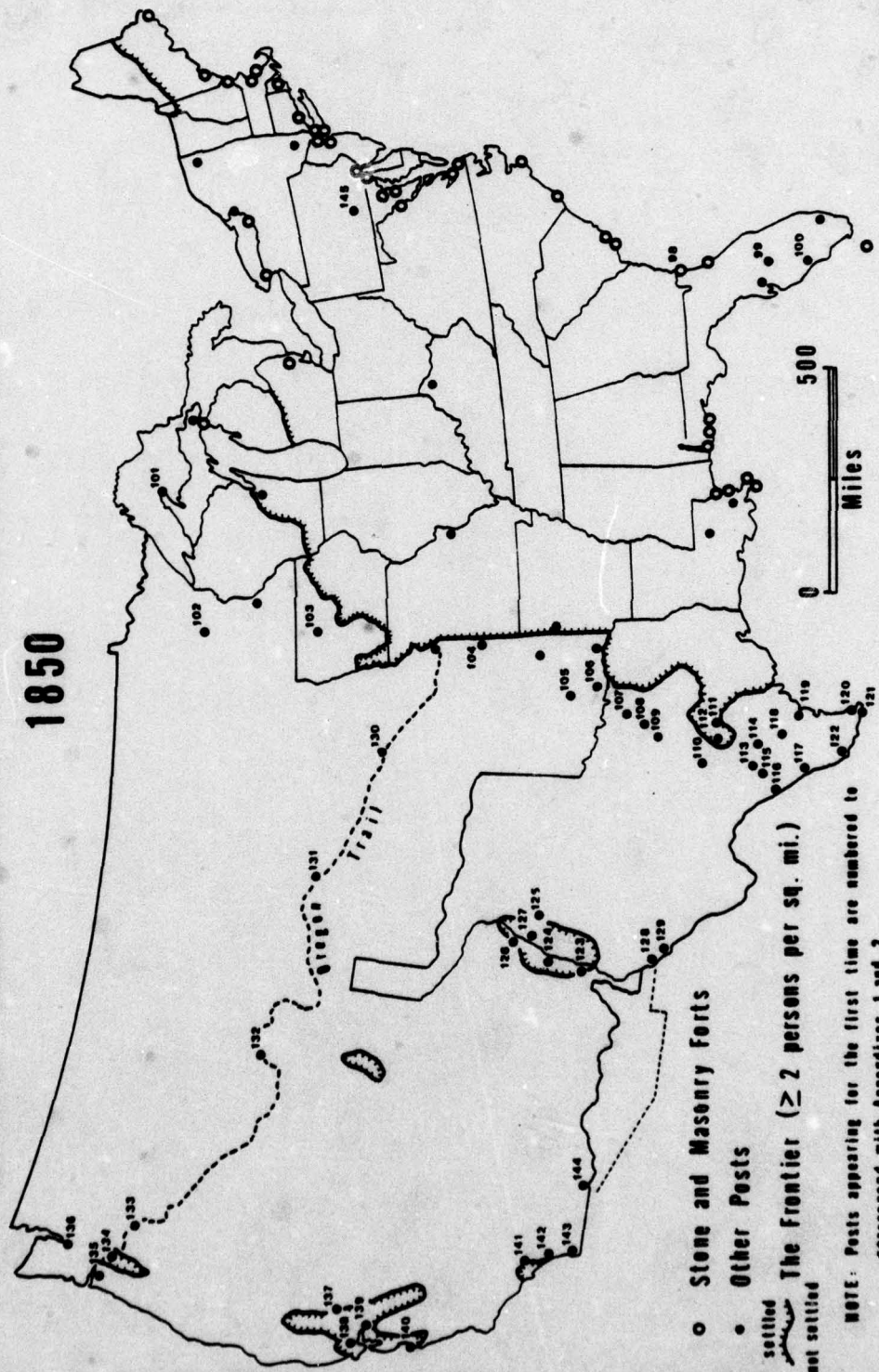
DWR

Map 8. Active Army Posts in the United States in 1860. In the years immediately preceding the Civil War, the expansion of coastal forts had almost come to a complete halt. Reports submitted to the Secretary of War in 1859 attacked the system because of its high costs, and because the forts seemed to fit the needs of the Regular Army more than the militia (Morton, 1859, 8-10). During the decade, the percentage of Army funds used for fortification declined considerably (see table 1).

The reduction of funds for coastal fortification was a reflection of growing discontent with the system, but it was also a reflection of the increased costs of operating the Army in the West. Activity was high to the southwest and west, and the number of posts in those areas increased significantly. The Army was building roads and conducting surveys for railroads, while at the same time trying to control white settlers and gold seekers and increasingly desperate Indians. During this period the Army moved many of its garrisons away from frontier settlements and deeper into Indian territories. This action was a product of the hostility between the Army and frontier populations, as well as a decision to actively pursue hostile Indians (Frazer, 1963, xxii-xxix).

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, p. 52. Surgeon General, Circular No. 4, pp. 162-470. U. S. Department of the Interior, Soldier and Brave, pp. 12-24.

ACTIVE ARMY POSTS IN THE UNITED STATES

1860

DWR

500

Miles

0

● Stone and Masonry Forts

• Other Posts

settled
not settled

— The Frontier (≥ 2 persons per sq. mi.)

NOTE: Posts appearing for the first time are numbered to correspond with Appendices 1 and 2.
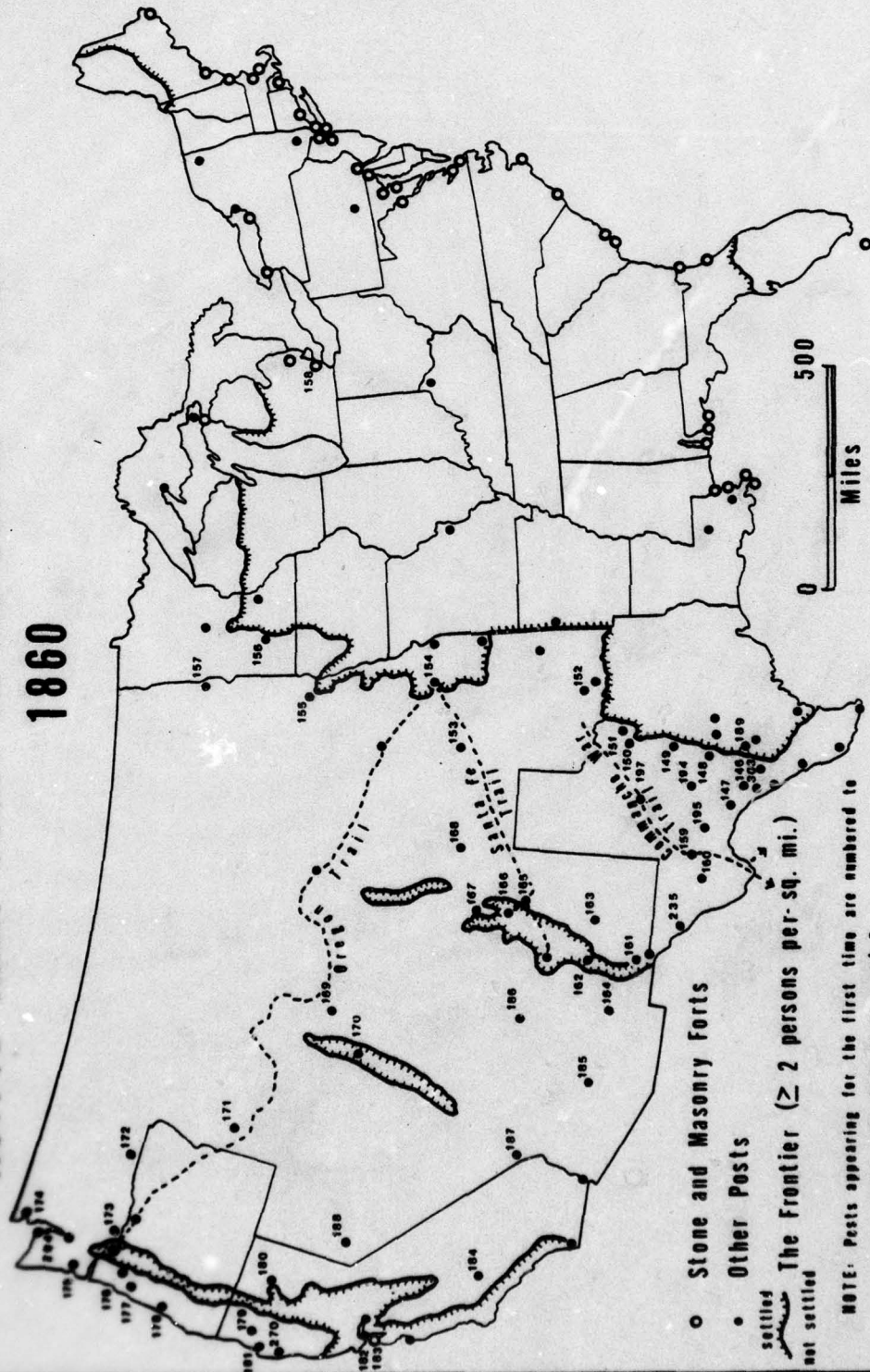
Map 9. Active Army Posts in the United States in 1870. The American Civil
War marked the beginning of the end for the nation's stone and masonry
coastal forts. The new stone forts shown here were all built prior to
1865, and after that time no new stone and masonry forts were built in
the United States. Stone walls proved to be no match for the rifled
guns and iron-plated ships introduced during the war, and many of the
forts in the South surrendered within hours after they were attacked.
Fort Sumter and others survived longer, because stubborn defenders
made hasty repairs to the crumbling walls with sandbags and dirt. Most
fortifications built during the Civil War were constructed of earthen
entrenchments similar to those used later in World War I.

Sectional conflicts prior to the Civil War had brought many
settlers rushing to lands west of the Mississippi River, but the end
of the war brought the real flood. The Homestead Act, the Cattle
Kingdom, and gold fever were some of the factors involved. All-out
war with the Plains Indians developed as they fought for survival, and
the Army scattered across the West to contain them. The large number
of posts in Arizona reflected the major struggle with the Apache Indians
and others of that region, while Indians of the Northern Plains felt the
pressure from all directions. As the frontier closed in from east and
west, the Army was at the height of its Indian-fighting days. Even the
occupation of the conquered South took a secondary position to settle-
ment of the West. The Army posts of the West were many, and they were
small. This map provides an indication of the confusion that reigned
in the Wild West. In such a situation it was impossible for the War
Department to control an Army that was two thousand miles away.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and
Lord, Historical Atlas of the United States, p. 104. Surgeon General,
Circular No. 4, pp. 162-481. U. S. Department of the Interior, Soldier
and Brave, pp. 12-24. Tom Scanlan, ed., Army Times Guide to Army Posts
(Harrisburg, Pa: The Stackpole Company, 1963), p. 250.

ACTIVE ARMY POSTS IN THE UNITED STATES
1870

Stone and Masonry Forts

Other Posts

The Frontier (≥ 2 persons per sq. mi.)

settled

not settled

NOTE: Posts appearing for the first time are numbered to correspond with Appendixes 1 and 2.

Miles

0   500

DWR
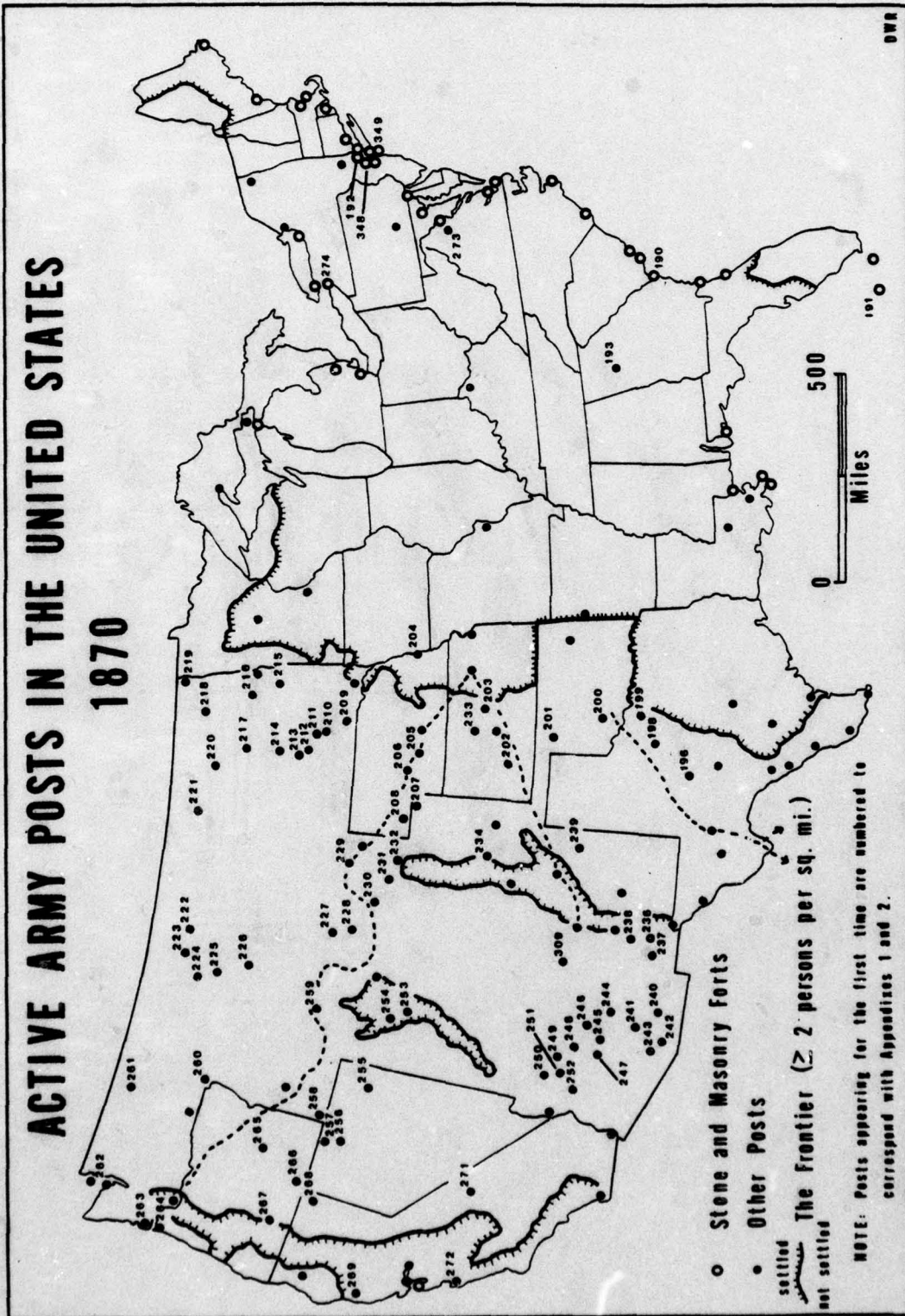
Map 10. Active Army Posts in the United States in 1880. A reduction in the number of active stone and masonry forts was evident by this date (notably in the South). Many of the forts were in poor repair, and appropriations were not forthcoming after 1875 (see table 1).

The Indian wars were still active in the arid regions, but the situation was obviously beginning to settle down. Most of the new frontier posts of the decade were concentrated in the Northern Plains, where the continued strength (and desperation) of the Indians was reflected in the massacre of General Custer and his men in 1876. With a few exceptions the Indians of the Southwest had been subdued by this time and were being herded onto reservations. Many posts were left over from the previous decade and signified the growing stability of the region. Although the boundaries of Oklahoma were completely delineated, it was still officially Indian Territory for the tribes that had been transferred from the East after 1830.

SOURCES: Prucha, Guide to Military Posts, plates 14-20. Lord and Lord, Historical Atlas of the United States, P. 104. Surgeon General, Circular No. 4, pp. 162-481. Robert T. Lincoln, Secretary of War, Report to Congress by the Secretary of War and the Board of Engineers on the Conditions of Fortifications in the United States in 1881 (Washington, D. C.: U. S. Government Printing Office, 1881), pp. 20-35.

ACTIVE ARMY POSTS IN THE UNITED STATES
1880

Legend:
○ Stone and Masonry Forts
● Other Posts

settled
・・・ The Frontier (≥ 2 persons per sq. mi.)
not settled

NOTE: Posts appearing since 1870 are numbered to correspond with Appendices 1 and 2.

0   500
Miles
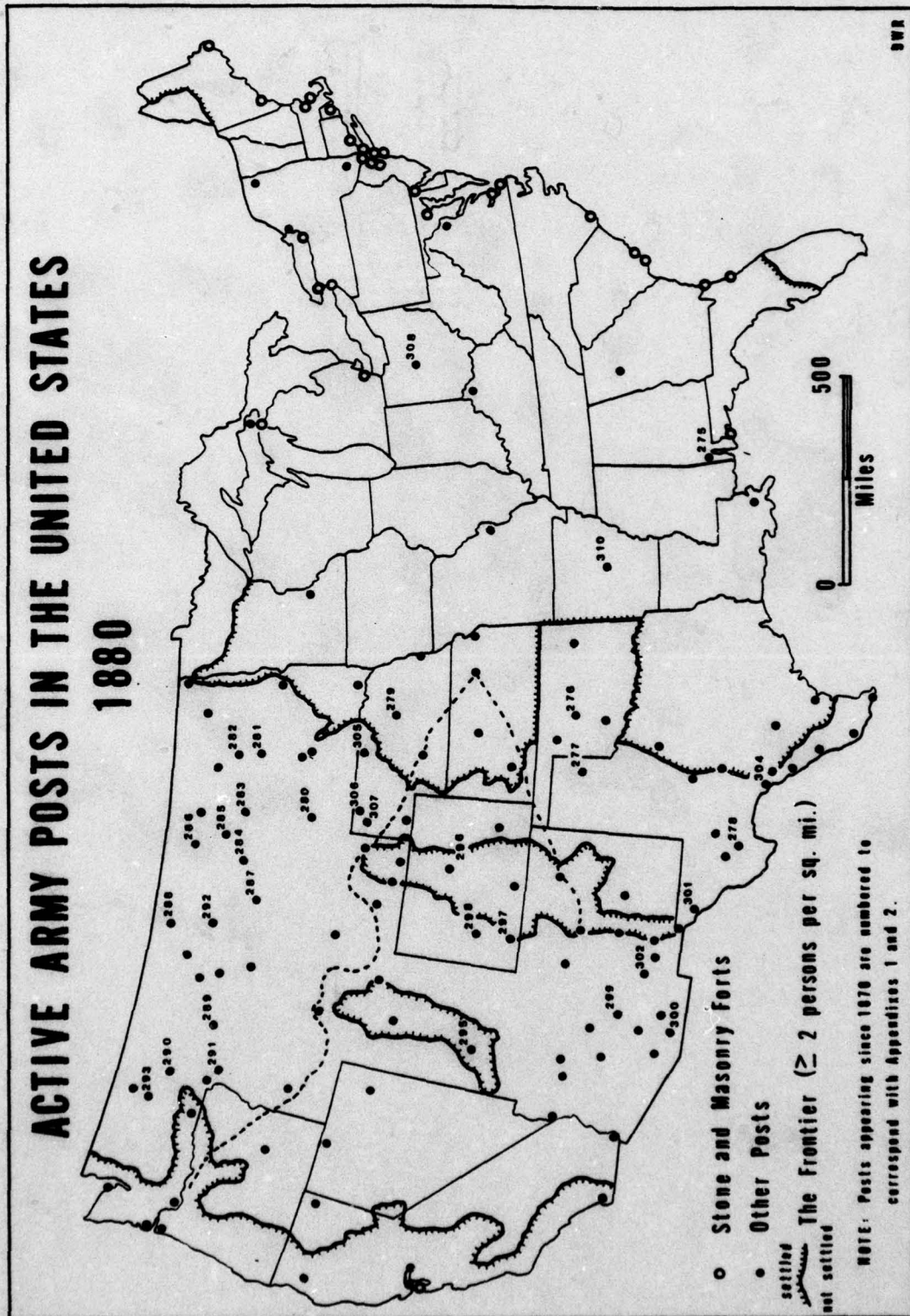
Map 11. Active Army Posts in the United States in 1890. In 1886 the Endicott Board passed judgment on the stone and masonry forts of the United States and declared them obsolete (Endicott, 1886, 5). Many of them were abandoned during the decade. Others remained active, but the guns of the original forts were removed in most cases, and small positions with modern weaponry were established around the forts. Stone forts along the Great Lakes were released from the control of coast artillery units, until by 1910 all of them were occupied by infantry units. New York Harbor was conspicuous by its retention of old forts.

In 1890 the Census Bureau officially declared the closing of the frontier. The last major battle of the Indian was also fought in that year. Only two new posts were established in the arid regions, and several other frontier posts were abandoned. In general, the distribution of Army posts in 1890 might best be described as a state of limbo. Stone forts and frontier forts were no longer needed, and modern posts had not yet developed. One indication of the changing times was the creation of Fort Sheridan (#312) in 1887. This post was used to house Army units that were employed to control the labor riots of Chicago.

SOURCE: U. S. War Department, Office of the Secretary of War, Annual Report of the Secretary of War, 1890, vol. 1 (Washington, D. C.: U. S. Government Printing Office, 1890), pp. 85-89.

ACTIVE ARMY POSTS IN THE UNITED STATES
1890

○ Stone and Masonry Forts
● Other Posts

NOTE: Posts appearing since 1890 are numbered to correspond with Appendices 1 and 2.
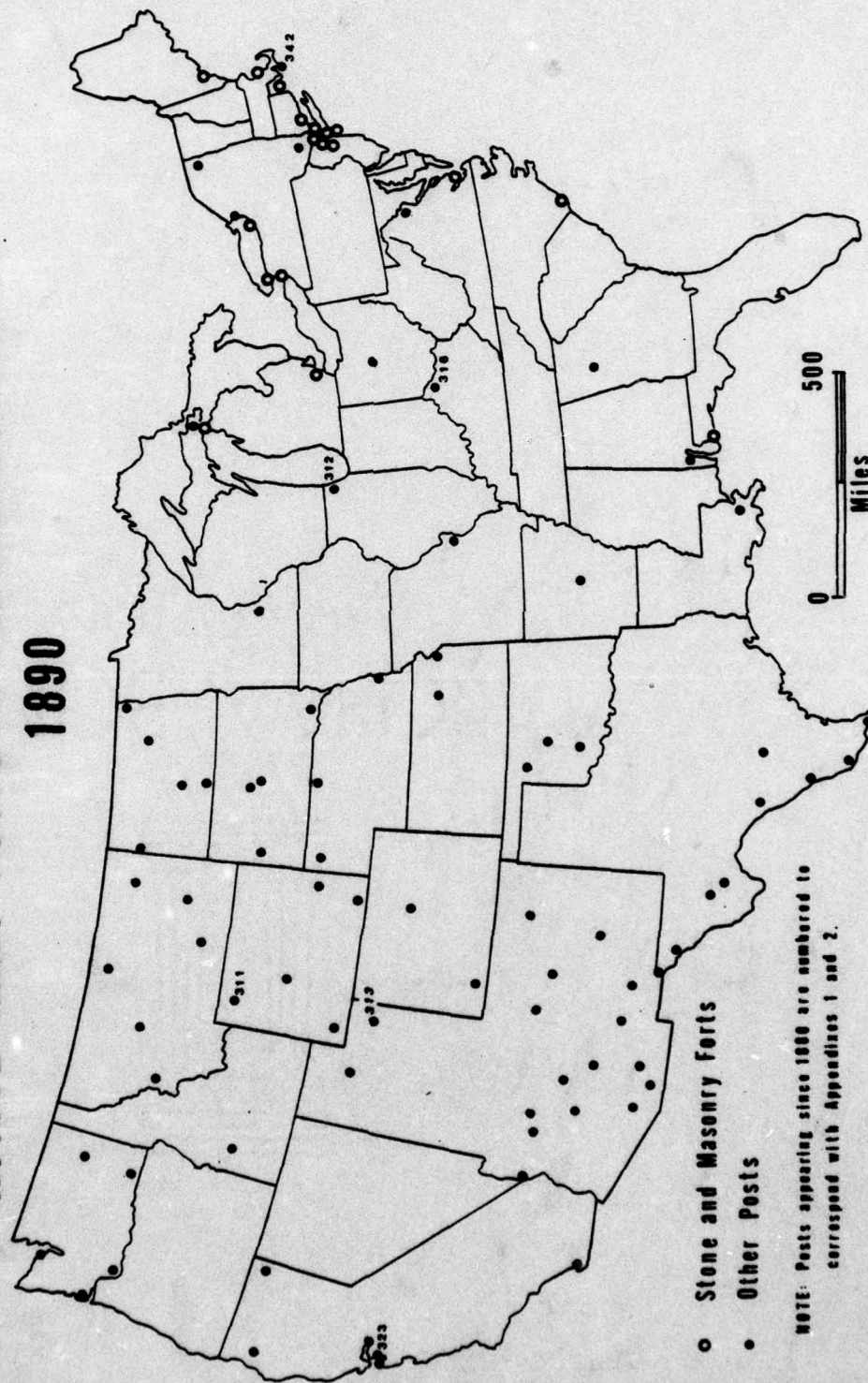
Map 12. Active Army Posts in the United States in 1900. The revisions to the nation's coastal defenses were becoming more evident by this date. Concrete, steel, improved weapons, and disappearing gun carriages were only some of the new techniques used to supplement and replace the old stone and masonry forts. The dispersion of gun positions was accounted for in some degree by the appearance of more posts on both the Atlantic and Pacific coasts.

The number of posts in the arid West was further decreased, as the Army began to congregate in larger and more permanent installations. Except on the coasts, however, little evidence of an eastward migration of the Army existed, despite the Spanish-American War and the emergence of the United States in international politics.

SOURCES: U. S. War Department, Annual Report of the Secretary of War, 1900, pp. 134-135. Scanlan, Army Times Guide to Army Posts, pp. 3-274.

ACTIVE ARMY POSTS IN THE UNITED STATES
1900

500

Miles

0

● Stone and Masonry Forts

• Other Posts

NOTE: Posts appearing since 1880 are
numbered to correspond with Appendixes 1 and 2.
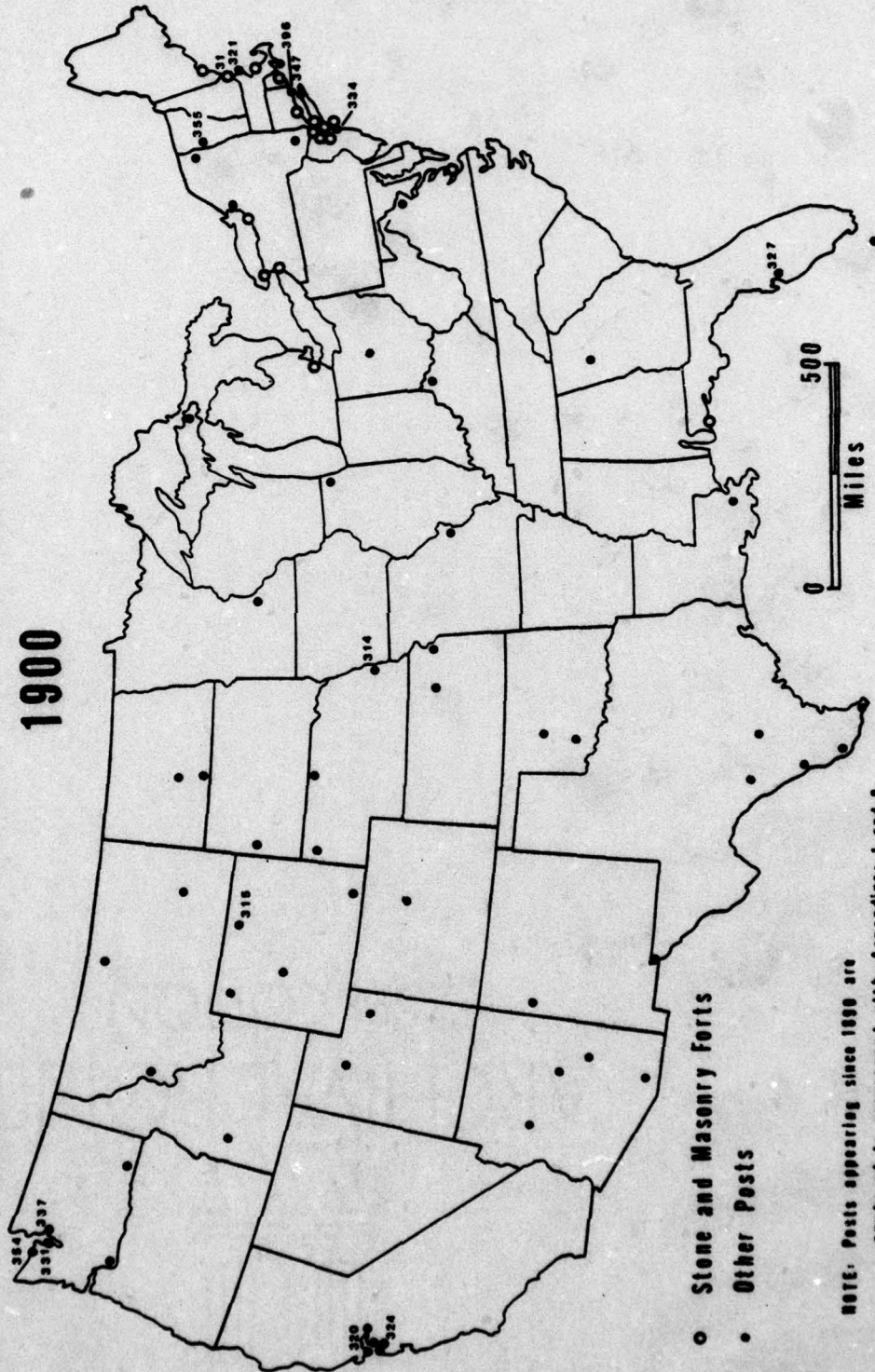
Map 13. Active Army Posts in the United States in 1910. Following the guidelines set by the Endicott Board in 1886, rejuvenation of coastal defenses continued through the decade leading to 1910. More posts were opened, and some of the older coastal forts were even reoccupied. Modern coastal defenses were even more expensive than the old ones, and the reoccupation of old forts may have been an indication that the new programs were not doing so well. Apparently, the legacies of Bernard and Totten were still useful in some respects.

There were still many forts of the former frontier still in existence, but a migration of Army posts toward the east was evident. The majority of new posts created during the decade were east of the Great Plains. Considering the communication and transportation limitations of the period, the Army was certainly easier to control and supply when located nearer to major communication links and population centers.

SOURCE: U. S. War Department, Office of the Adjutant General, Army List and Directory (Washington, D. C.; U. S. Government Printing Office, Janurary 1910), pp. 5-7.

ACTIVE ARMY POSTS IN THE UNITED STATES
1910

o Stone and Masonry Forts

• Other Posts

NOTE: Posts appearing since 1900 are
numbered to correspond with Appendixes 1 and 2.

500

Miles

0
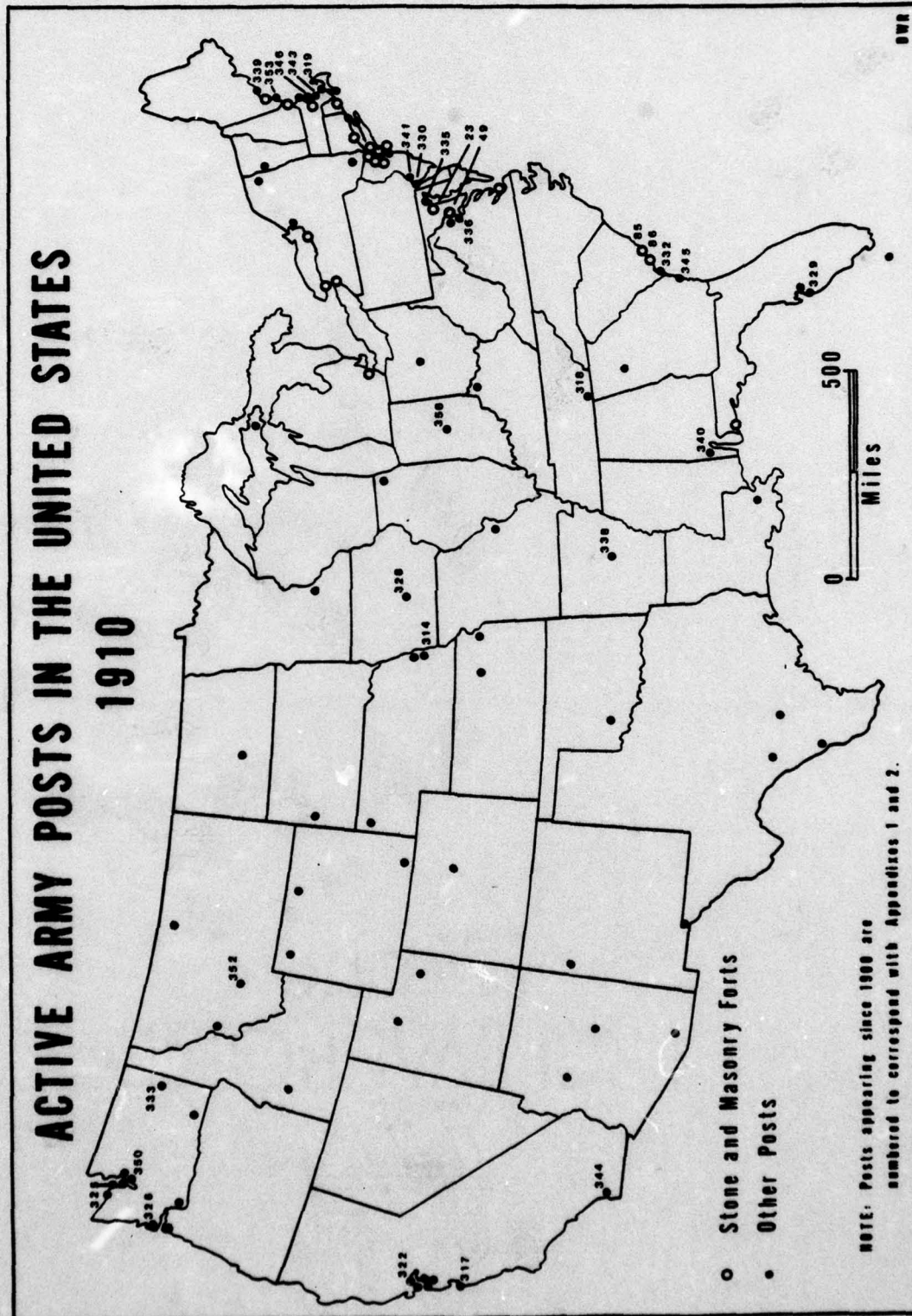
Map 14. Active Army Posts in the United States in 1920. World War I and the Mexican Revolution provided the primary background for the distribution of Army posts in 1920. Coastal defense forts were established during the decade, but the principal legacies of the turmoil were established in the interior of the country. The raids of Francisco Villa revived interest in the security of the border with Mexico, and the mobilization of troops for Pershing's expedition in 1916 required the activation of a number of posts in that region. World War I hastened the demise of many former frontier forts in the West, and most of the large mobilization camps for that war were built in the East and South. Many of the camps remained as major posts after the war. Meanwhile, the slow death of stone and masonry forts continued as Forts Sumter, McHenry, and Trumbull were closed for the last time.

SOURCE: U. S. War Department, Army List and Directory, July 1920, pp. 30-36.

NOTE: On maps 14 through 16 (1920-1940) the bases of the Army Air Corps have not been shown, because the Air Corps was more closely related to the present-day Air Force than to the Army.

ACTIVE ARMY POSTS IN THE UNITED STATES
1920

○ Stone and Masonry Forts

● Other Posts

NOTE: Posts appearing since 1910 are numbered to correspond with Appendices 1 and 2.

500

0

Miles
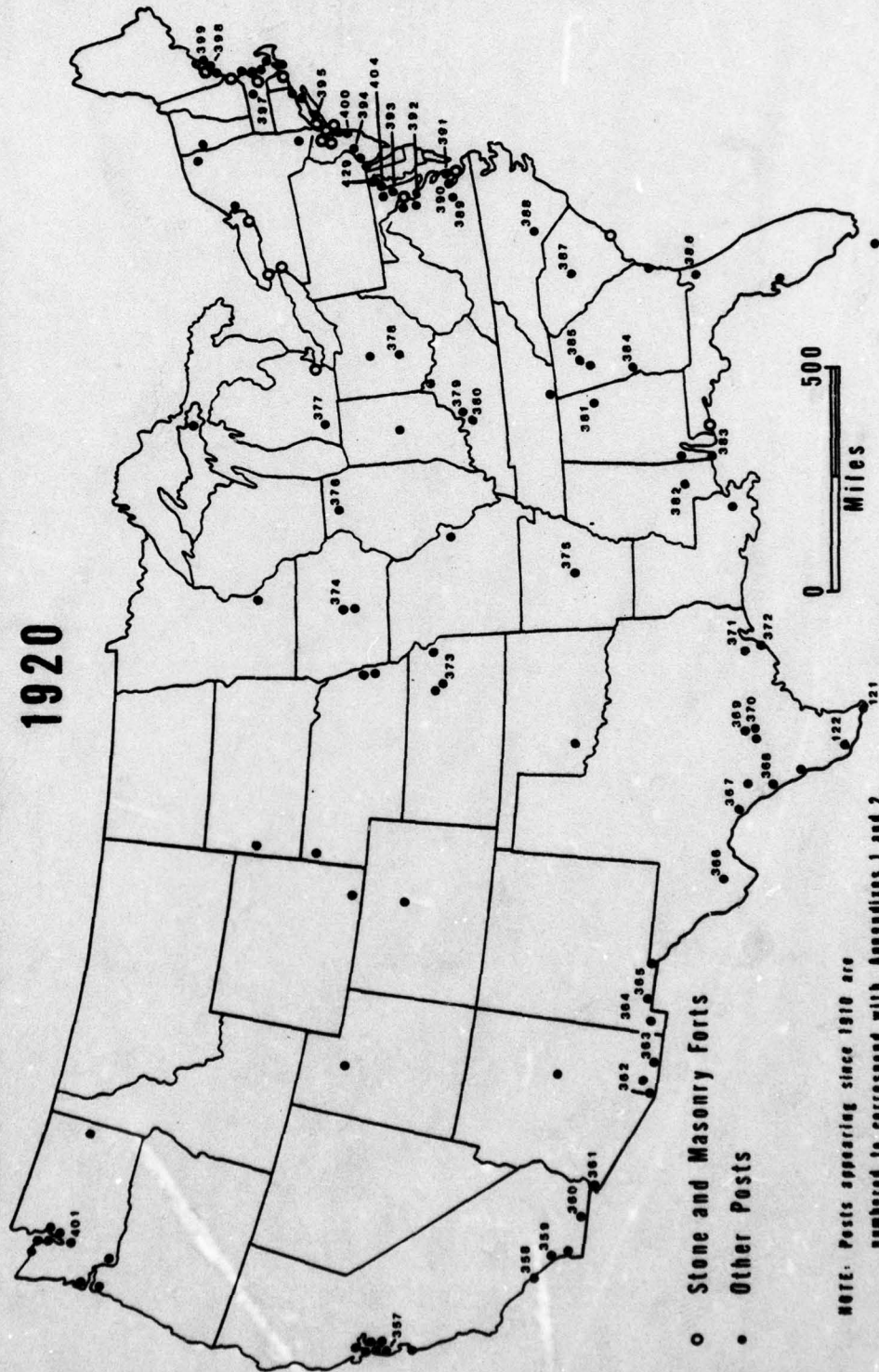
DWR

Map 15. Active Army Posts in the United States in 1930. Only a moderate number of Army posts were activated or reactivated in the decade prior to the Great Depression. Most of these were in the North and East, although former frontier forts were reoccupied in North Dakota and Montana. The number of new coastal forts continued to grow, although at a much slower rate than in previous decades, while old stone and masonry forts continued to decline in number. Several of the World War I mobilization camps were inactivated and auctioned between 1922 and 1926, while some of the tent camps in the South were turned over to the states for National Guard training.

SOURCE: U. S. War Department, Army List and Directory, January 1930, pp. 36-42.
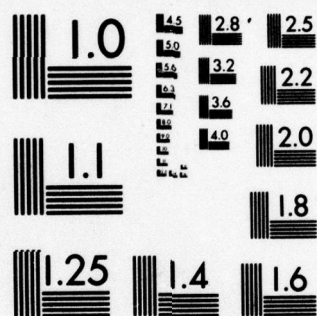
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

ACTIVE ARMY POSTS IN THE UNITED STATES
1930

o Stone and Masonry Forts

• Other Posts

NOTE: Posts appearing since 1920 are
numbered to correspond with Appendixes 1 and 2.

500

Miles

0
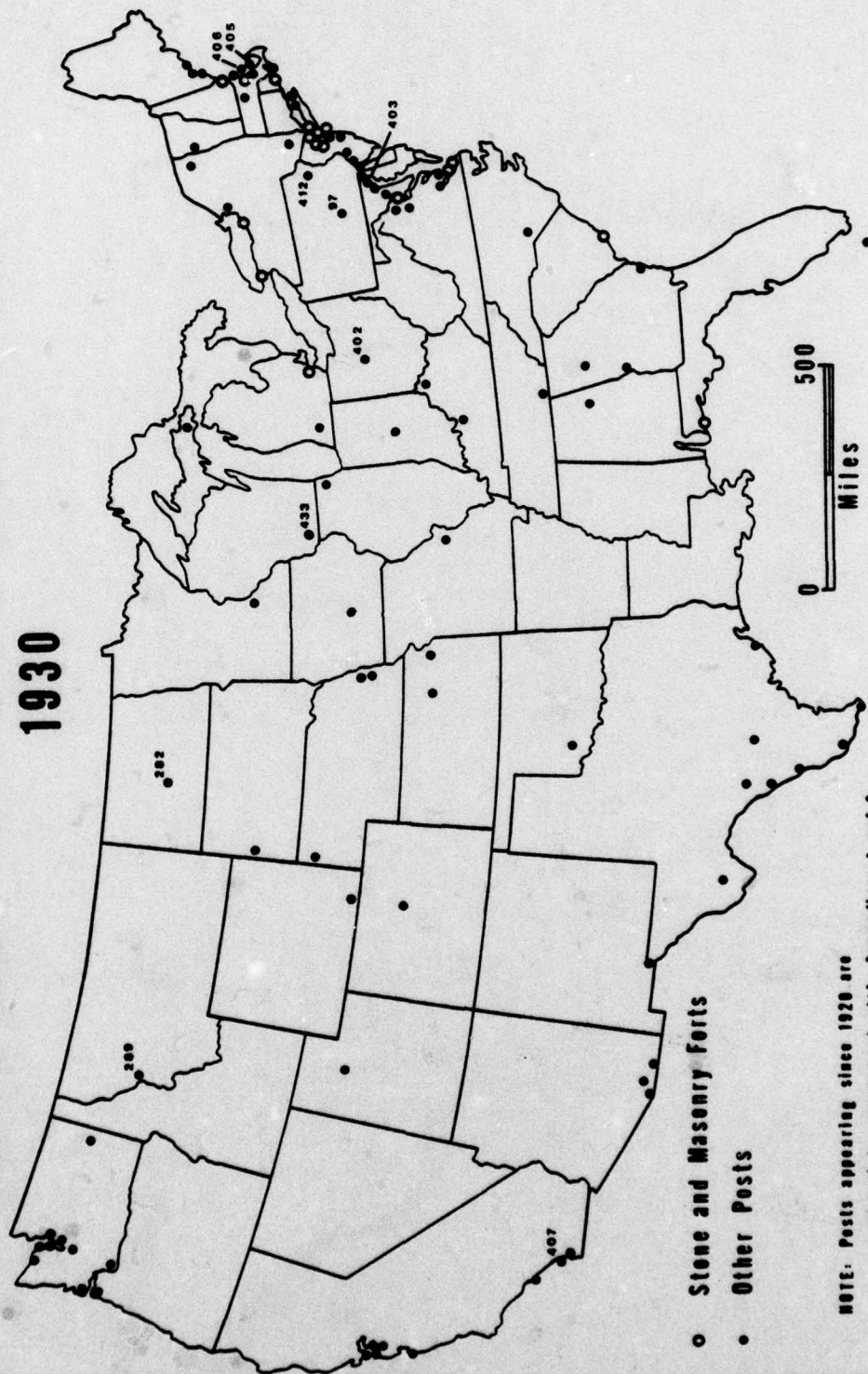
DWR

Map 16. Active Army Posts in the United States in 1940. On the eve of U. S. involvement in World War II the government was obviously rethinking the entire concept of coastal fortification. The number of coastal forts had decreased dramatically from the previous decade. Some mobilization of the Army was apparent by the activation or reactivation of a few training camps. Fort Ord (#408) was the only major post activated, while Fort Jackson (#387), a World War I camp, was reactivated and awarded a permanent status.

SOURCE: U. S. War Department, *Army List and Directory*, October 1940, pp. 29-39.

...

ACTIVE ARMY POSTS IN THE UNITED STATES
1940
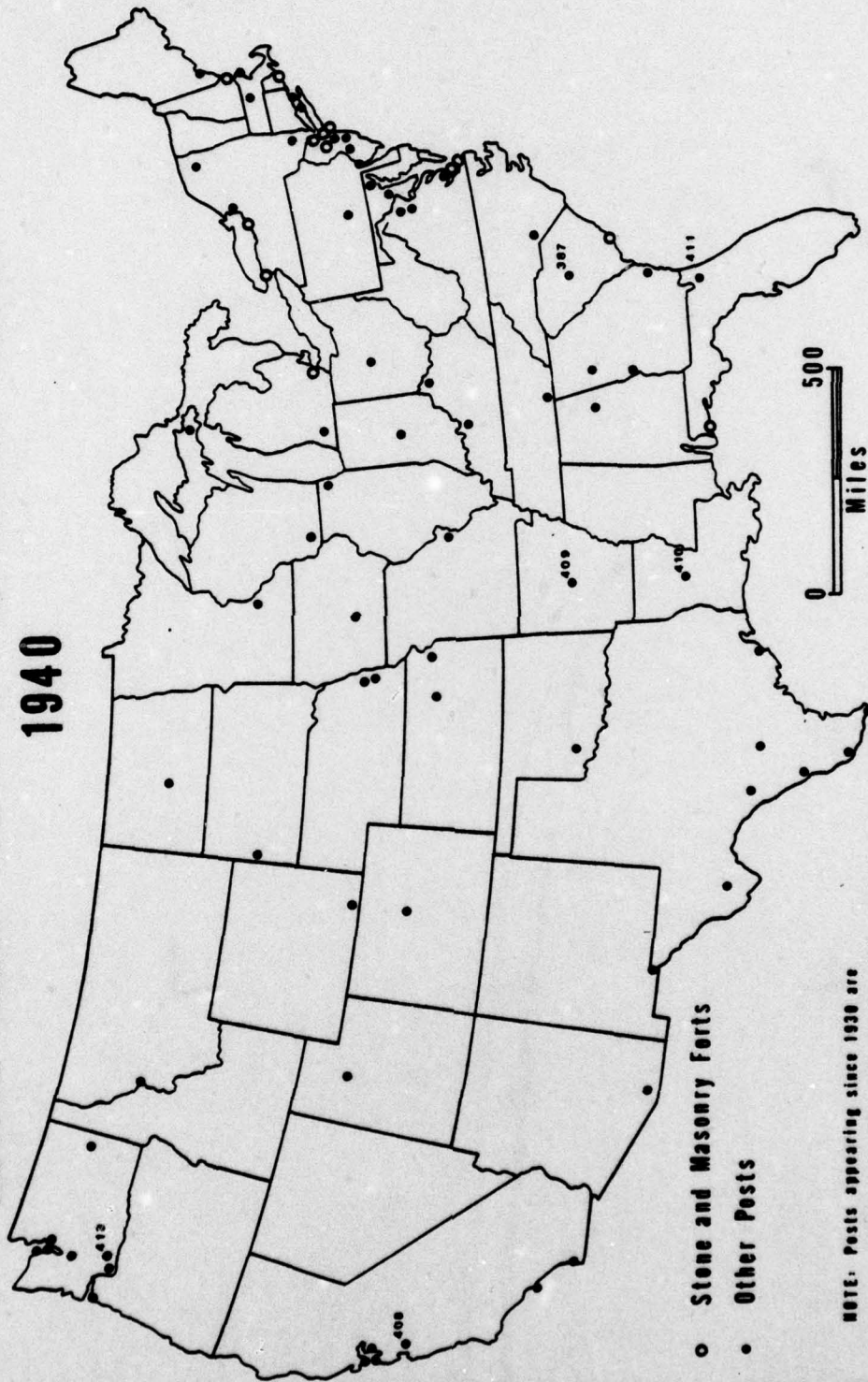
- ○ Stone and Masonry Forts
- ● Other Posts

NOTE: Posts appearing since 1930 are numbered to correspond with Appendices 1 and 2.

Miles
0   500

83

Map 17.   Active Army Posts in the United States in 1960.   Like most other
wars in the history of the nation, World War II left its imprint
on the distribution of Army posts. Following the war, the Army
deactivated the coast artillery branch in 1947. Coastal defense
was a thing of the past in the age of missiles. Nevertheless, a
few of the old forts were still active in 1960 as reminders of the
past. The Cold War required the United States to maintain a much
larger Army than it had in the past, and that Army was distributed
largely on major posts in the South. A dramatic shift from previous
decades was obvious.

SOURCE: Scanlan, Army Times Guide to Army Posts, pp. 1-274.

ACTIVE ARMY POSTS IN THE UNITED STATES
1960
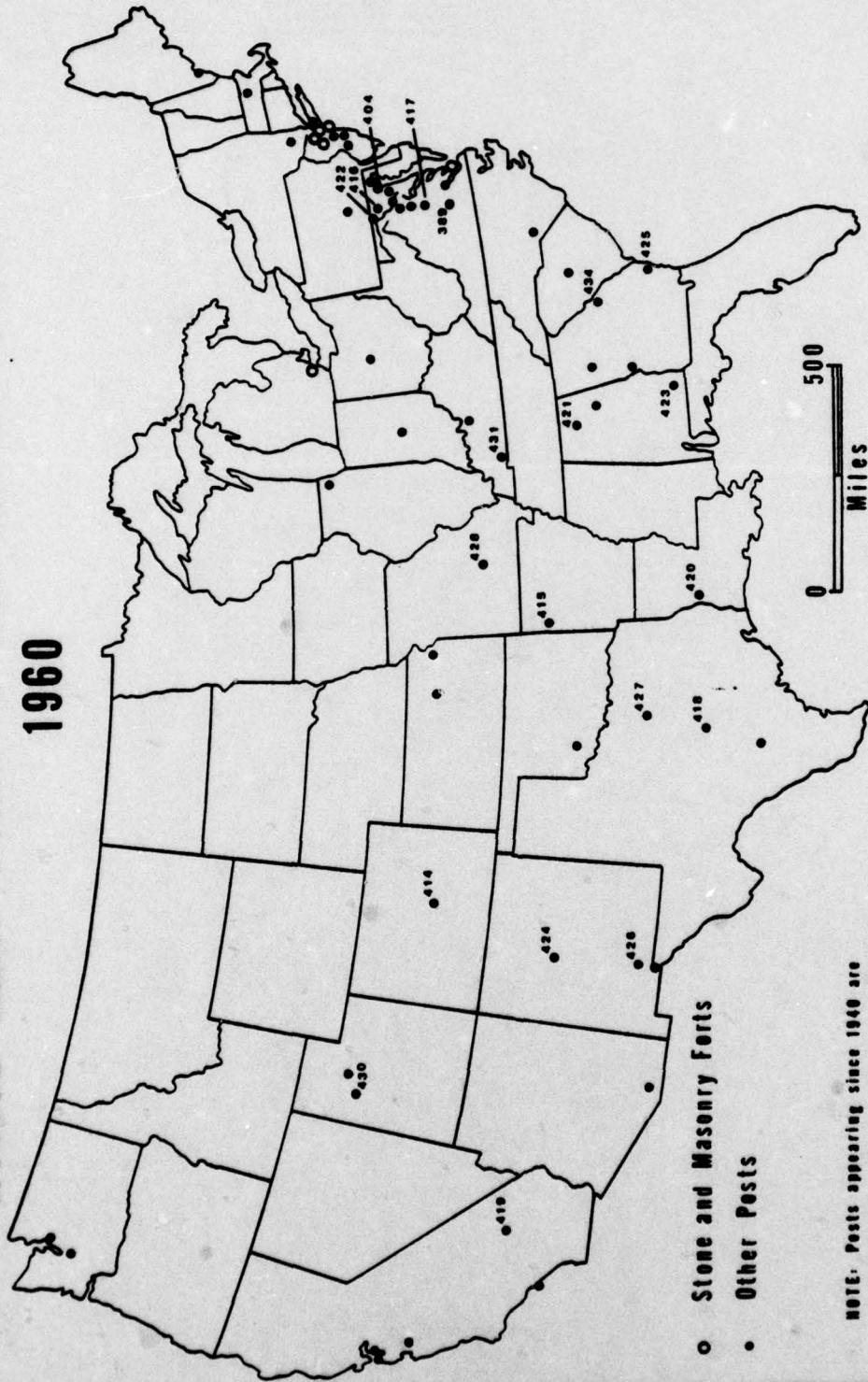
○ Stone and Masonry Forts

● Other Posts

NOTE: Posts appearing since 1940 are
numbered to correspond with Appendices 1 and 2.

500

0

Miles

DWR

Map 18.   Active Army Posts in the United States in 1978.   Since 1960 the
major change in the distribution of Army posts has been a reduction
in their number.   Fort Drum (#435) appears to be the only candidate
for a major new post in the near future.   It too was the site of
a World War II training camp.   The reasons for the large number of
posts in the South are many, and they are not altogether clear.   The
most commonly accepted notion has been that they are tied to the
control of Congress by politicians from the South.
        Something from nearly every era in the history of the United
States is evident in the present distribution of Army posts.
Carlisle Barracks, Pennsylvania is a reminder of the pre-Revolutionary
development of the Army.   Forts Monroe and Hamilton remain as evidence
of military engineering in the French tradition of fortification.
Forts of the Wild West remain in Kansas, Oklahoma, Texas, and
Arizona.   Fort Sheridan, Illinois grew out of the labor strife in
the late nineteenth century.   Most of the remaining posts are
legacies of the two World Wars.   Although the Army has remained
at a relatively large size since World War II, the number of major
posts is fewer today than at any time since about 1840.   They are
large and relatively permanent.   They are important social, economic,
and political factors.

        SOURCE: John Greenwald, ed., The Times Magazine Guide to
Military Installations in the U. S. (Washington, D. C.: Army Times
Publishing Company, June 1978), pp. 5-18.

ACTIVE ARMY POSTS IN THE UNITED STATES
1978

435

○ Stone and Masonry Forts

• Other Posts

NOTE: Posts appearing since 1960 are
numbered to correspond with Appendixes 1 and 2.

0   500

Miles

DWR
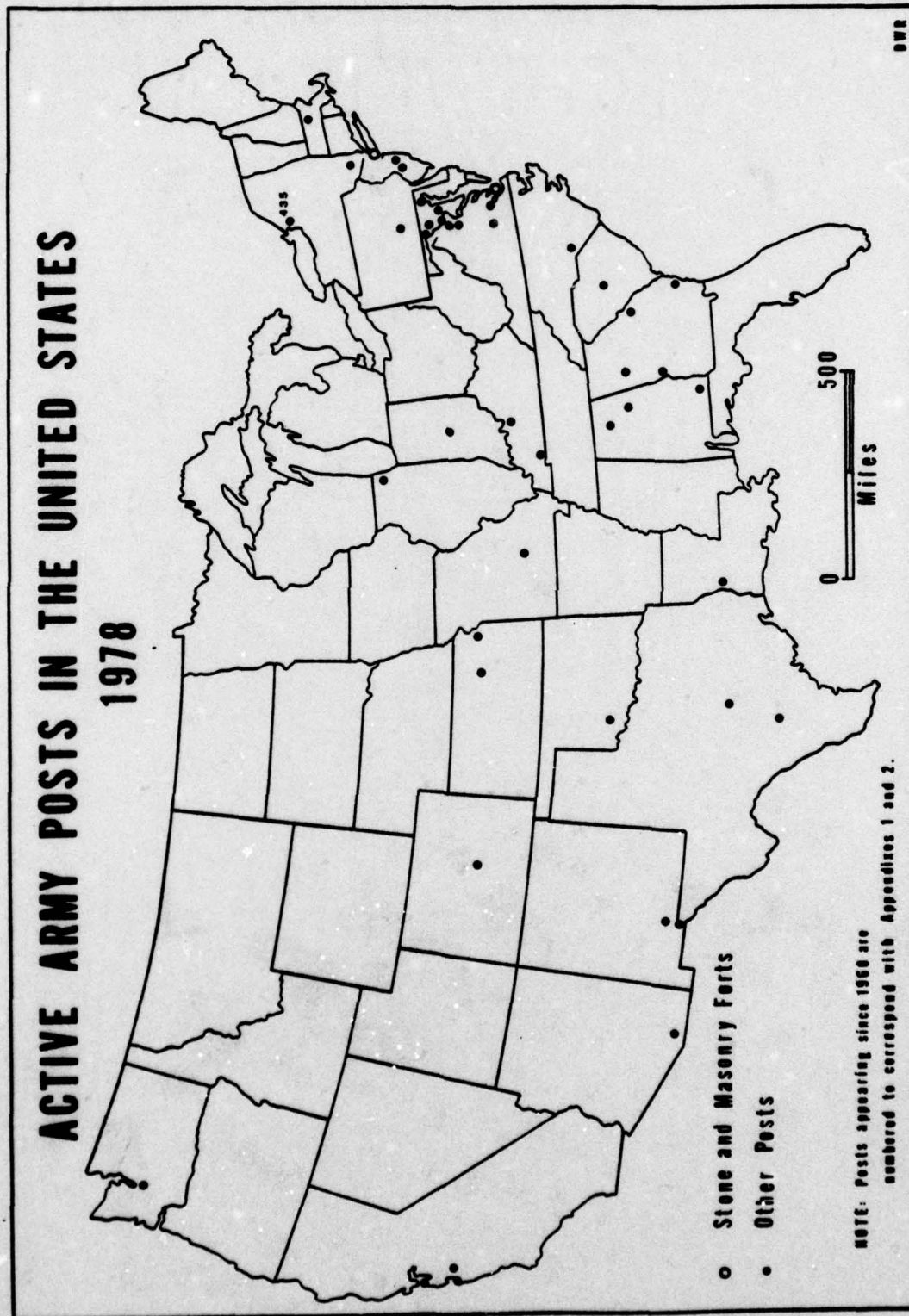
standing Army to a minimum (see table 1). Louis XIV
and Vauban had used fortification to keep the size of
the French army under control, and America did the same.
George Washington had described the militia as "the
palladium of our security, and the first effectual
resort in case of hostility" (quoted in Adler, vol. 2,
1968, 606). Thomas Pickering, Secretary of War in 1795,
expressed the military policy of the United States as
follows:

> To garrison the most important fortifications
> on the sea coast. The smaller ones in time of peace
> may be taken care of, each by an individual, such as
> an invalid, or other poor citizen, at a very small
> expense (Lowrie and Clarke, 1832, 112).

On the eve of the Civil War Americans were still
arguing about the importance of designing coastal forts
for the use of militia, instead of for the Regular Army:

> For defensive purposes we have no other reliance
> than our citizen soldier, and it is hoped we never
> will have need of other, or have such forced upon us
> (Morton, 1859, 70).

The First System

America's "first system" (Robinson, 1977, 85) of
fortification begun in 1794 fell far short of expecta-
tions. The appropriation of 1794 authorized the con-
struction of permanent forts at fourteen ports and
harbors along the Atlantic coast (see map 19). In
reality, fewer than half of these had been initiated
by the turn of the century (see map 2). Most of the
forts were built with temporary materials. By 1808

TABLE 1

APPROPRIATIONS FOR COASTAL FORTIFICATIONS, 1794-1889

Fiscal Year	Appropriations	Percent of Total Army Spending
1794	$106,000	4.0
1795	50,000	2.0
1797	115,000	11.1
1803	108,888	13.2
1804	114,492	13.1
1816-1819	588,475*	6.5*
1822	350,000	11.2
1823	482,000	15.6
1824	620,000	18.6
1825	782,972	21.4
1830	892,321	15.5
1835	No Appropriation	0.0
1840	1,402,568	19.8
1845	No Appropriation	0.0
1850	892,170	9.5
1855	797,700	5.4
1860	675,000	6.0
1861	1,395,000	6.0
1865	Not Available	-
1870	Not Available	-
1875-1889	No Appropriations	0.0

SOURCES: Matthew St. Clair Clarke and Walter Lowrie, eds., _American State Papers_: _Documents, Legislative and Executive, of the Congress of the United States_, vols. 7 and 8: _Military Affairs_ (Washington, D. C.: Gales and Seaton, 1832), pp. 50, 117-118, 175, 197, 308, 458, 568, 715. U. S. War Department, Office of the Secretary of War, _Annual Reports of the Secretary of War_ (Washington, D. C.: U. S. Government Printing Office, published annually from 1822 to 1947).

NOTE: All available data were used for the period to 1825. After 1825 samples were taken at five year intervals. The figure for 1861 was the only one available for that decade.

*Figures represent averages for each year.

Map 19. Proposed Coastal Forts in the United States in 1794. The appropriations of 1794 authorized the construction of permanent stone and masonry forts at fourteen sites along the Atlantic coast. One fort was authorized at each site. Fewer than half of these were constructed by 1800, and nearly all of those built were considered inadequate by 1808.

SOURCE: Walter Lowrie and Matthew St. Clair Clarke, eds., American State Papers: Documents, Legislative and Executive, of the Congress of the United States, vol. 7 (Washington, D. C.: Gales and Seaton, 1832), p. 107.

PROPOSED COASTAL FORTS IN THE UNITED STATES
1794

500

Miles
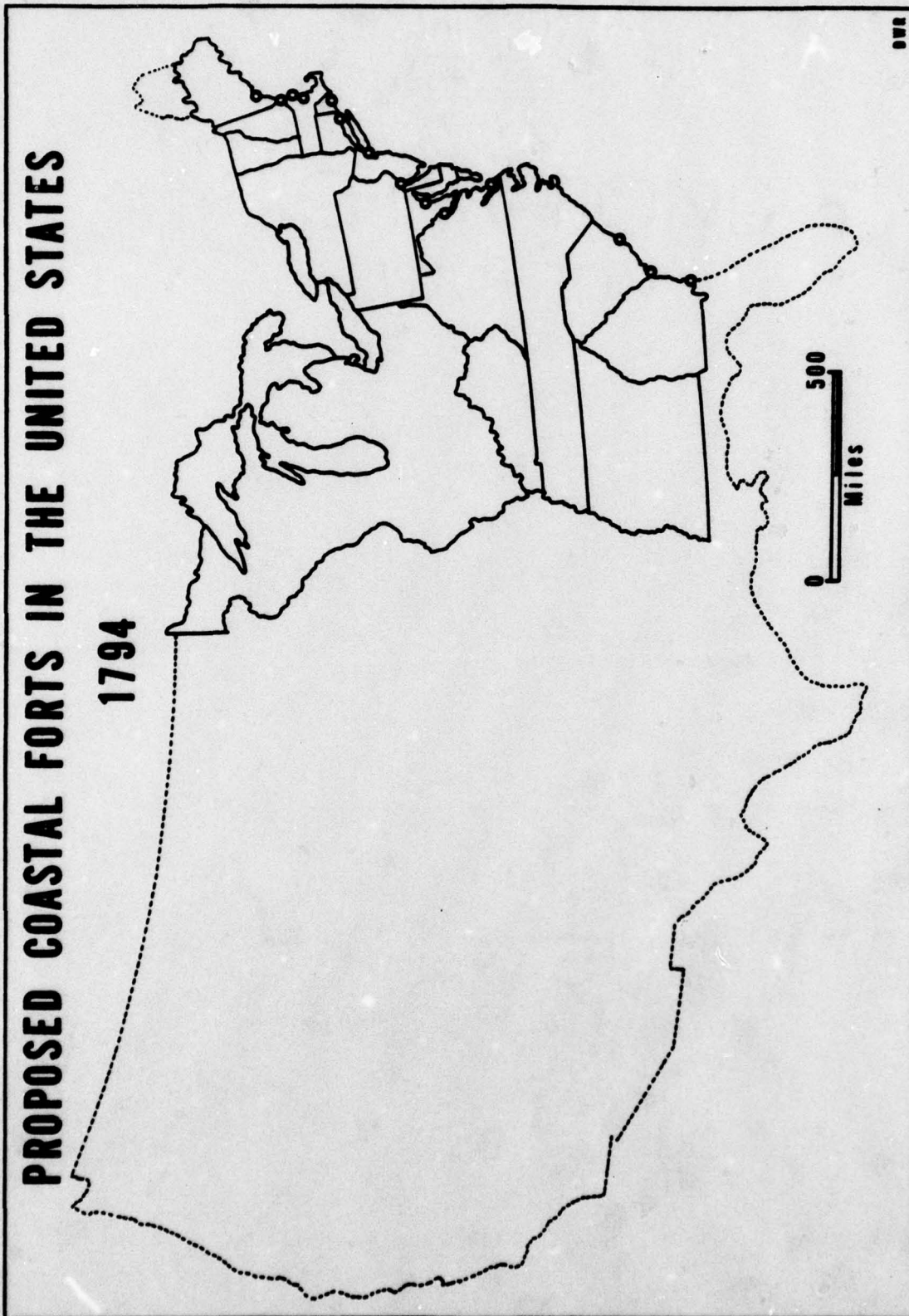
they were considered inadequate for harbor defenses,
and many of them had to be rebuilt (Grant, 1965, 13).
Usually, there was only one fort to defend each of the
major ports or harbors selected (Robinson, 1977, 85).

Not surprisingly, the designs of these early forts
were largely French in origin. They were relatively
small, and as in the English coastal system, they were
meant to be independent. They were not as elaborate as
Vauban's designs, but they employed some of the same
principles. They also used the concepts of a later
French architect, Montalembert. Montalembert argued
that the secret to success in fortification was in the
number of guns that a fort could employ. The way to do
this was to mount guns in multiple tiers, one on top of
the other in tower forms, with each gun completely
enclosed within a casement. Previous architects had
used only one main row of guns mounted on the open plat-
forms of the wall (Ferguson, 1849, 17). Montalembert
also felt that the bastioned outlines of Vauban's designs
were too wasteful and expensive, and much better economy
and efficiency could be exercised by building round forts
or forts with simple geometric designs. An additional
advantage was that fewer troops were needed to man such
forts (Robinson, 1977, 73). Montalembert's principles
were epitomized in the design of Castle Williams, built
on Governor's Island, New York in 1807 (see figure 8).
This was one of several castle forts (consisting largely
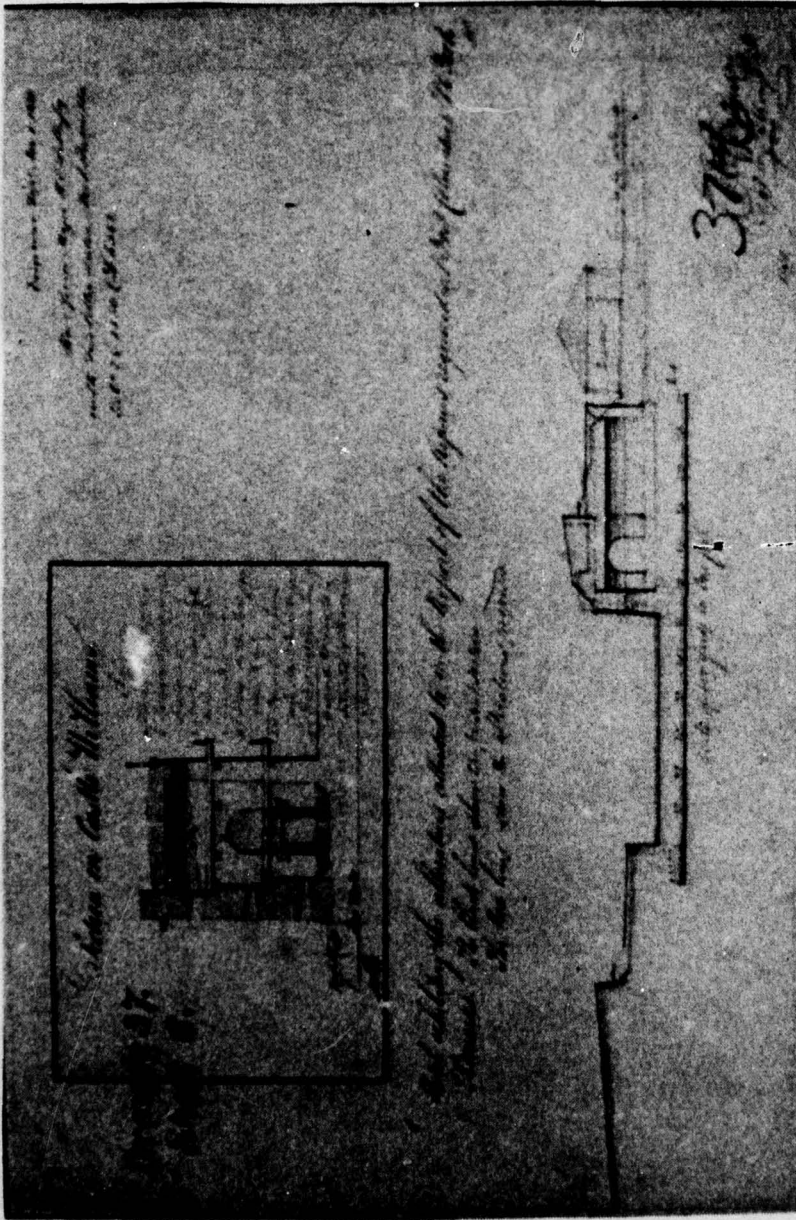
Figure 8. Castle Williams at Governor's Island, New York, 1807. The cross
section at top shows the three-story tower of this castle fort.
Guns were enclosed at each level. At bottom is a cross section
of the more typical Fort Columbus, also on Governor's Island.
Compare this cross section to that in figure 1 (page 30).

SOURCE: National Archives, Drawer 37, Sheet 6.

of Montalembert towers) that were built during the
early years of the nation's history (Robinson, 1977,
74). Other forts of the era, such as Fort Hamilton,
Rhode Island (see figure 9), showed a curious mixture of
bastions and rounded towers.

Although the intentions were good, the United
States met with very little success in its first attempt
to build coastal forts. It was soon discovered that the
appropriations passed in 1794 with such high hopes were
not nearly enough to do the job. Congress passed fur-
ther appropriations through at least 1804 (see table 1),
only to find the forts still incomplete (Lowrie and
Clarke, vol. 7, 1832, 106-118). The cost of the program
was more than had been expected, and the nation was
reluctant to pay the additional funds. Figure 2 (page
16) reveals that Army expenditures as a proportion of
all government outlays were relatively high for a peace-
time America during the period from 1794 through 1800.
A large part of that money went toward coastal fortifi-
cations, yet there were still insufficient funds. At
least until the ascendancy of Thomas Jefferson and the
Democrat-Republicans, the government paid a great deal
of attention to the nation's defenses, albeit with little
success.

The government could not appropriate money it did
not have, and in addition to an unstable economy, the

Figure 9. Fort Hamilton, Rhode Island, 1800. This
sketch of Fort Hamilton shows a curious
mixture of bastions and towers. The towers
were a distinct departure from the theories
of Vauban. This particular Fort Hamilton
should not be confused with Fort Hamilton,
New York, which opened in 1825. It was not
a very permanent or important fort, and is
not even mentioned in most official sources.

SOURCE: George W. Cullum, Historical
Sketch of the Fortification Defenses of
Narragansett Bay since the Founding in 1638
of the Colony of Rhode Island (Washington,
D. C.: U. S. Government Printing Office,
1884), p. 21.

FORT HAMILTON.

traditional American distrust of the government and
the military kept expenditures at a low level. Even
though there was legitimate reason to fear an invasion
from Europe during the early years of the Republic,
distrust of the government and the military had much
to do with the lack of preparation for such an invasion.
When war threatened with Franch in 1798, President Adams
increased the size of the Army and pushed for completion
of the coastal defenses (see figure 1). His actions
brought a storm of protests from many sources, and the
size of the Army was reduced once again (Weigley, 1967,
98-99). One such protest came from the local government
of Dinwiddie County, Virginia. The members of that
county government, like the members of many other local
governments, felt that President Adams was trying to
strengthen his party's control over the country by
building a large standing army. They issued a proclama-
tion that standing armies were not only dangerous to
liberty, but that they were also:

> Detrimental to the public welfare; because indus-
> trious men are heavily taxed to support those who
> do nothing; because indolence among the poor is
> publicly encouraged; the army being an asylum for
> all who do not chose to labor; . . . immediate
> defense against a sudden invasion, might be attained
> infinitely cheaper by putting arms into the hands of
> every man capable of bearing them; . . . (quoted in
> Adler, vol. 4, 1968, 72).

The Star Forts

Renewed threat of war with Great Britain finally

prompted an increased effort to complete an adequate coastal defense system. Between 1808 and 1811 as many as twenty-four forts and thirty-two separate gun positions were initiated or rebuilt along the coast (Dupuy, 1961, 58). Many of these were the same forts that had been planned or begun prior to 1800, and they still lacked integration or depth (Robinson, 1977, 85).

The stone and masonry forts of this second system were epitomized in the design of Fort McHenry, Maryland (see figure 10). Fort McHenry was begun as early as 1798, but its design was typical of many forts that were built in the years immediately preceding the War of 1812. It was a pentagonal, bastioned fort built of dirt with brick facing on the walls, and it was a good replica of forts that had been built in Europe even before the age of Vauban. Vauban had praised the relative simplicity and efficiency of the bastioned pentagon more than 150 years earlier, and the shape had become common in Europe by the end of the sixteenth century (de la Croix, 1972, 50). Vauban referred to such regular shapes as "star-shaped forts" (Vauban, translated 1968, 4), and it was this shape that occupied many ports and harbors in the United States through the War of 1812.

Although Vauban appreciated the simplicity of the regular pentagon, he was careful to warn against the dogmatic standardization of forts. Instead, he preferred to fit his designs to the local terrain, and it has been
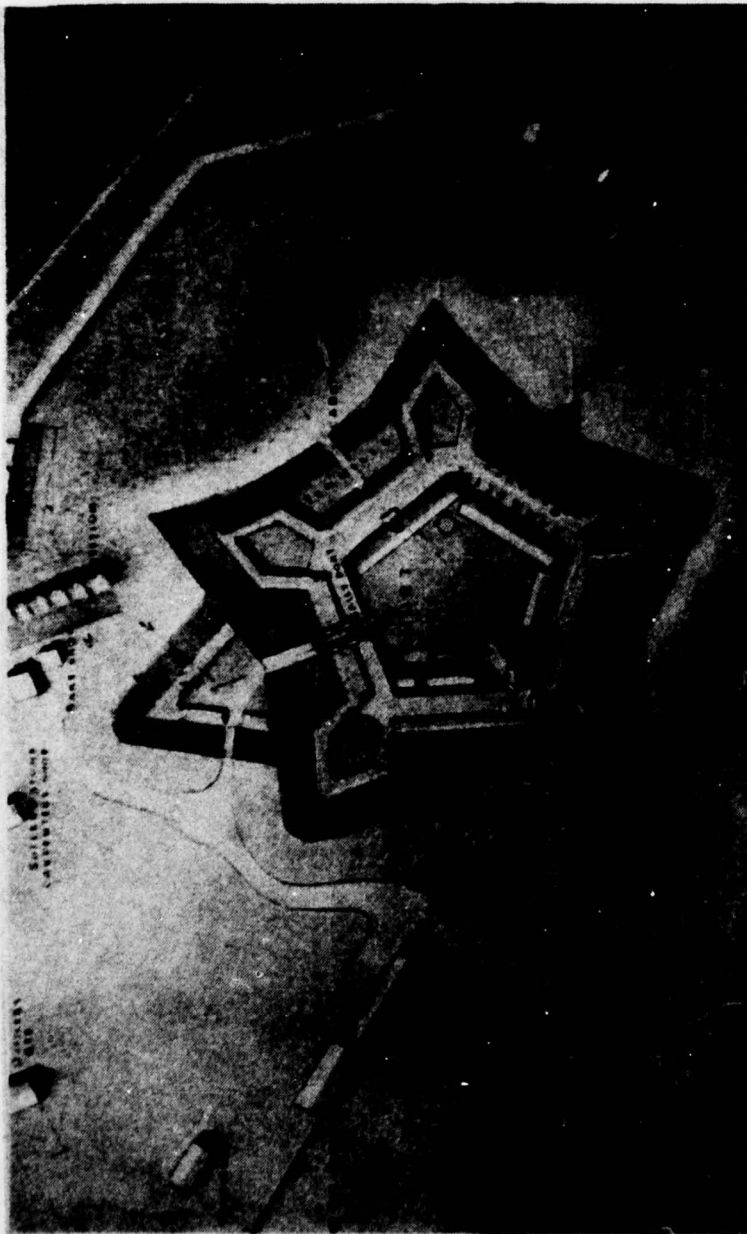
Figure 10. Fort McHenry, Maryland in about 1819. Although many modifications were made to this fort during its existence, it always retained this basic shape. Such star forts were frequently built in America before the War of 1812.

SOURCE: Historical Base Map drawn from original War Department plans. On file at Fort McHenry, Maryland.

said that no two forts built by Vauban were the same
(Hogg, 1975, 64). Despite such an example from the
recognized master of fortification, the pentagonal fort
(originally designed to fit French needs for all around
defense from land attack) was reverently transplanted to
the American coast.

Military conservatism and a belief in the superiority
of French fortification undoubtedly played a very large
role in the duplication of the pentagonal forts on
American soil. Military organizations have long been
noted for conservatism in favoring tactics and weapons
that succeeded in past wars. Braddock's army had been
defeated by the French and Indians in 1755, in part because
of an unwillingness to adopt frontier fighting techniques.
The same fate had befallen British forces at Lexington,
Concord, and Bunker Hill. American forces attacking at
Germantown in 1777 had turned victory into defeat, because
they had refused to bypass a small group of British
stragglers barricaded in a farmer's house, thus giving
the main British army an opportunity to regroup and
counterattack. According to advice given to General
Washington by Henry Knox, an avid student of European
tactics, "It would be unmilitary to leave a castle in
our rear" (quoted in Ketchum, 1958, 215). The mimicking
of the star forts was little different than Henry Knox's
mimicking of tactics that had been used in France during
the reign of Louis XIV. Most French engineers even copied

the styles of Vauban with little regard to the thought
behind them, and the regular polygon was more popular
in France than before Vauban (Hogg, 1975, 68).

The Embarrassment of 1812

Senator German of New York lamented that "our
treasury is empty" (quoted in Adler, vol. 4, 1968, 320)
when President Madison urged war on Great Britain in
1812. In urging greater preparation before embarking
on such an adventure, the senator pointed out:

> Nor should I have doubted our ability had our
> resources been well husbanded, for four of the
> five years past, to make war terrible on our enemy;
> but the tale of bad management of our resources is
> too obvious and too lamentable to be told at this
> time . . . (quoted in Adler, vol. 4, 1968, 321).

Such comments served to highlight the events of the
next few years. America entered the War of 1812 without
much preparation and with many weaknesses. One of those
weaknesses was its coastal defenses. While the Regular
Army was unsuccessfully invading Canada, the Atlantic
coast was left largely undefended. None of the major
coastal forts were captured, but the British managed to
bypass them, raid the coast, and burn the nation's
capital (Grant, 1965, 14).

Fortress America

America's embarrassment in the War of 1812 did not
destroy the belief in isolation. If anything, it in-
creased the determination to remain disentangled from

the affairs of Europe. Faith in the militia had been damaged, particularly in the eyes of the Regular Army, by the refusal of some citizen units to fight in Canada and by the poor management of Washington's defenses. These elements played important roles in the renewed coastal defense program that followed the war, but perhaps the most important element was a stronger feeling of nationalism (Weigley, 1969, 130-133). Without this nationalism the government might well not have been able to obtain the increased funds necessary to implement the program. Table 1 reveals that not only were funds for coastal defense much higher following the war, but they were also a substantial part of the Army's total budget. The Army's budget was increased in relation to the total government budget (see figure 2), and a large part of that increase went to coastal fortifications for the next several years. A wall of masonry began to form along the Atlantic coast of Fortress America (see map 4, 1820).

Since no major forts had been captured by the British during the war, faith in French fortifications was not diminished. Instead, the failure of coastal defense was seen to lie in the fact that there were not enough forts, and that the forts were not integrated to support one another. It was obvious to the planners of the new system that the entire Atlantic coast could not be fortified. Instead, the forts were designed to defend as many of the major coastal cities and deep water ports as possible.

If an enemy was going to invade, he would not be able
to come ashore near a strategic city. Bernard and Totten
were the chief designers of the system, and they were
given free reign to design the best system they could
(Robinson, 1977, 85-91).

By 1821 the new system was well under way, and the
two principal designers reported to Congress on their
plans and progress. According to their report, the
system was designed to be built over a number of years,
so that the nation could raise the money gradually. Thus,
it could be made more palatable to the public and more
affordable to the government. The degree to which
Vauban's efforts in French fortification were reflected
in America's program could readily be seen in the following
comment that was made to Congress:

> France was at least fifty years in completing
> her maritime and interior defenses; but France, on
> more than one occasion since the reign of Louis
> XIV, has been saved by the fortifications erected
> by her power, and by the genius of Vauban (Lowrie
> and Clarke, vol. 8, 1832, 308).

In accordance with such long-range planning for a
system that would protect America's coast indefinitely,
three priorities were set. The first priority was to
build large and powerful forts at the most important
ports and harbors in the nation. This effort was to
cost an estimated $8 million. The second priority was
to cost about $4.7 million and would comprise forts built
at the less important ports and harbors. The last priority

was to cost about $5 million and consisted of the
smallest forts at the least important sites, plus
secondary forts to support the main forts of the first
two categories (Lowrie and Clarke, vol. 8, 1832, 308).
The forts were to be maintained in peacetime by small
Regular Army garrisons or caretaker forces. In wartime
their principal manpower would come from the state
militias. Ironically, such an expensive and intricately
designed system was meant to hold off an attacking force
for only fifteen days, until a relief force could be
mustered to drive the enemy away (Robinson, 1977, 91).

Designs and Locations

American coastal forts of this latest era retained
the general principles of Vauban and Montalembert.
Bernard and Totten took the best elements of Montalembert
and combined them with the principles of Vauban to build
America's third system of coastal defense.

Naturally, the largest and most important forts of
the post-1812 era were constructed at the largest and
most important ports in the United States. The ports of
the Northeast and New Orleans qualified in this respect.
Work began in these ports soon after the War of 1812 was
over, and all of the first priority forts were completed
before the Civil War. The forts of this category were
exemplified in the design of Fort Monroe, Virginia (see
figure 11), which lay claim to the largest stone and
masonry fort ever built in the United States. These
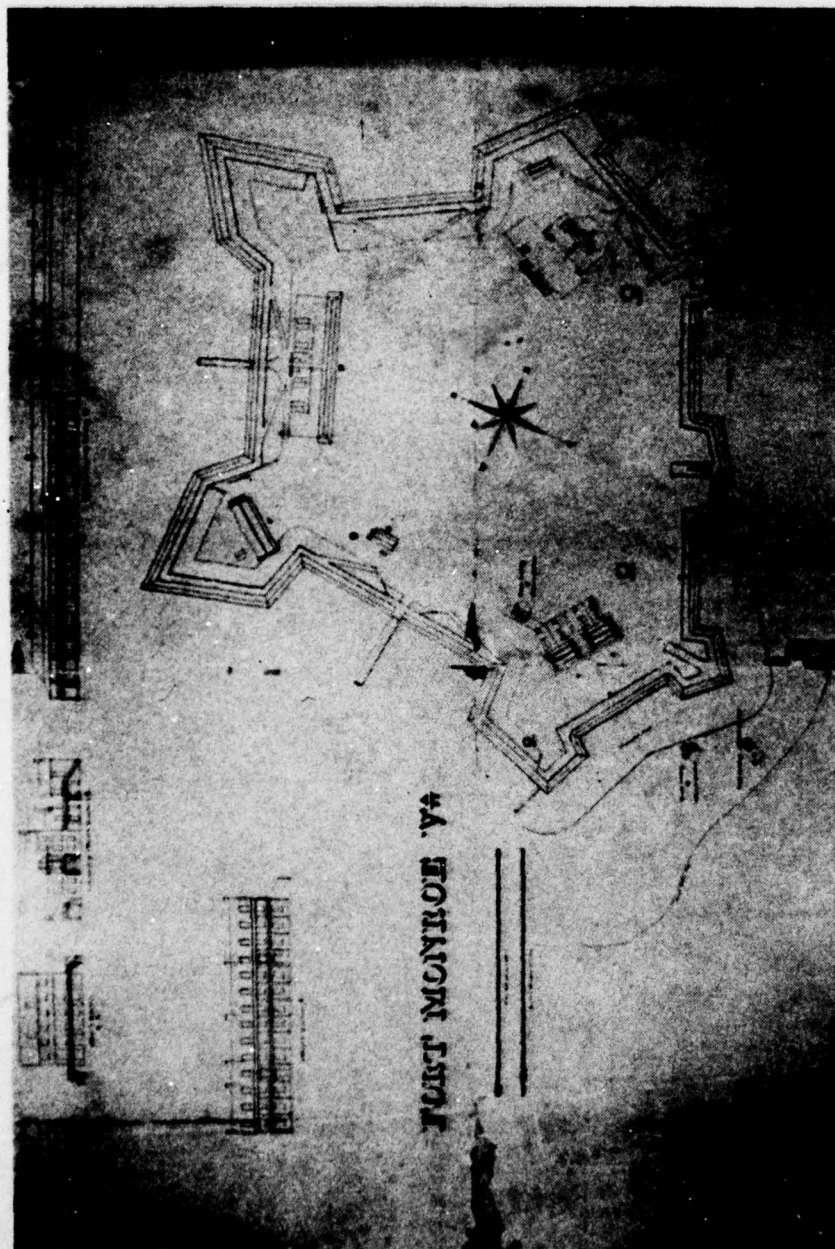
Figure 11. Plan of Fort Monroe, Virginia. Fort Monroe lay claim to being the largest stone fort built in America, and it was one of the most intricately designed. Situated on a small peninsula at Point Comfort, the granite walls were surrounded by a water-filled ditch.

SOURCE: National Archives, Record Group 77.

large forts followed the bastioned outline favored by Vauban. Unlike the <u>star</u> <u>forts</u> of the pre 1812 era, they did not exhibit the regular geometric shape of the pentagon. Instead, they were designed to fit the terrain. The distance between bastions and the general shape of the fort depended on the limitations of the terrain and the direction of the major enemy threat. In addition to their irregular outlines and their bastioned traces, these forts employed casemented guns along with the guns mounted on the open rampart (see figure 12). Such casement guns had not been used in earlier forts, except when they were employed in Montalembert towers (see figure 13).[1]

The smaller and less important forts of the Bernard and Totten system were built on the South Atlantic coast. Plans for the defense of Charleston harbor were not drawn until 1826 (Robinson, 1977, 107). Fort Pulaski (near Savannah, Georgia) and Fort Sumter were not completed when the Civil War erupted (Prucha, 1964, plates 14-20). Some of the forts planned under the lowest priority were never begun. These were the second class citizens of America's coastal defense system. They were not as large, intricate, or expensive as the Vaubanian forts of the major ports and harbors. They usually consisted of two

_____

[1]The comments on the design and construction of these forts have been based in part on visits to the sites of Fort McHenry and Fort Monroe. Both forts are very well preserved, and they both have excellent museums.

Figure 12. Fort Monroe, Virginia in 1978. Looking
across part of the moat from one bastion
to the next, one has an excellent view of
the openings in the walls for the casements.
Fort Monroe was one of the most formidable
of the Atlantic coast fortifications. At one
time it was referred to as Fortress Monroe, a
title usually reserved for walled cities.

SOURCE: Photograph by David W. Rhyne.

Figure 13. Fort McHenry, Maryland in 1978. Fort McHenry
was a much smaller structure than Fort
Monroe (approximately one fifth the size).
Its walls were faced with brick, and it did
not employ casemented guns. This picture
looks from one bastion to the next, showing
some of the earthen defenses outside the
main wall.

SOURCE: Photograph by David W. Rhyne.
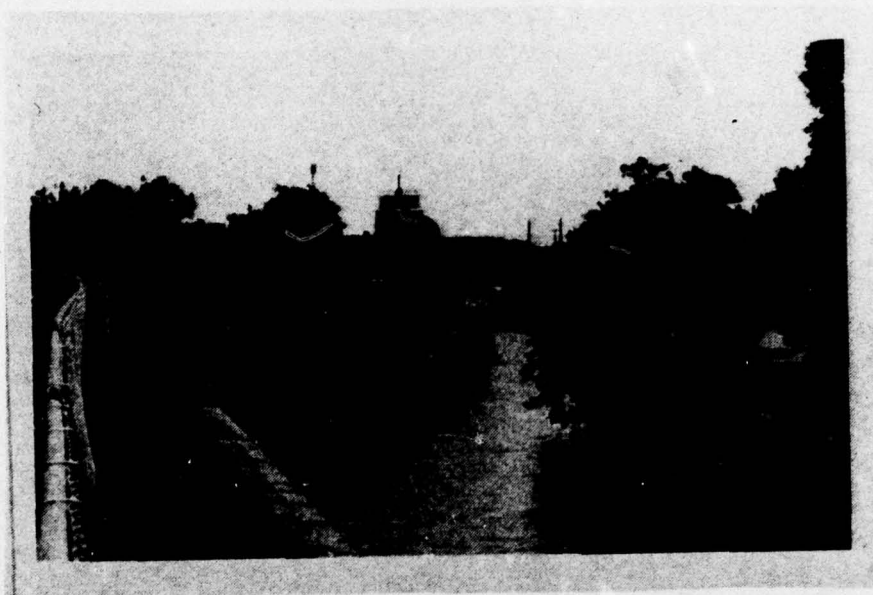
or more tiers of casemented guns in a simple geometric outline (see figure 14). They lacked the bastions of their larger counterparts, and many were built on small man-made islands in the harbors (Robinson, 1977, 107). Interestingly, these small forts of the Southeast coast were the ones that had to face the hardest tests of the Civil War. Few of them survived those tests.

Doubts about Fortification

The expenditures for coastal fortification in America were an alternative to a large standing army. Yet, once the memories of the War of 1812 began to fade, the cost of fortification itself began to be disputed. Throughout the 1830's and 1840's debates sprang up in Congress over the excessive costs of completing the system planned by Bernard and Totten (Robinson, 1977, 111). At least one year during that period (1835), no appropriation was forthcoming from Congress (see table 1). Doubts about the utility of expensive fortification were expressed in Europe as well as in America. Studies in Great Britain revived the somewhat forgotten notion that fortification was only a temporary defense against an invader. One British writer in 1849 noted that military experts in that country had set the maximum length a fort could resist at thirty-six days. He argued:

> If this is really all that fortification can do,
> it would be far better that we razed out bastions to
> the ground, and never spent another shilling on
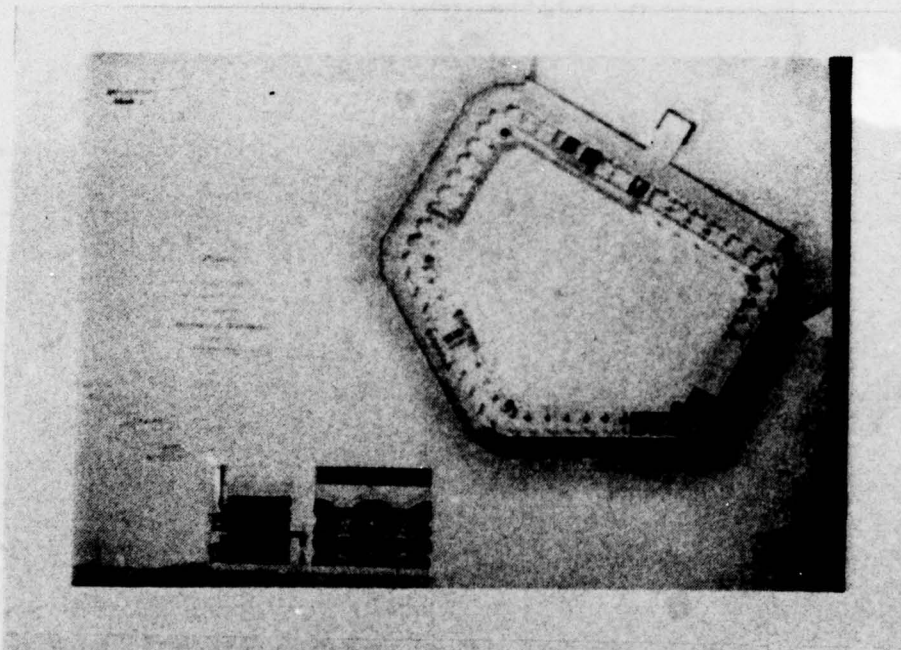
Figure 14. Plan of Fort Moultrie, South
Carolina. Fort Moultrie, like
Forts Sumter, Pulaski, and many
others in the South was one of
the forts in Bernard's second
priority. These forts followed
the theories of Montalembert
with their simple shapes, their
multiple tiers of guns, and their
small sizes. Many were built on
man-made islands.

SOURCE: National Archives,
Drawer 66, Sheet 1.

anything so useless: it is only a mode for courting certain defeat and disgrace through a false sense of security, and can never be of use to the defense of a country, or indeed for any great purpose (Ferguson, 1849, 14).

Ferguson's arguments were not ignored by Americans, and investigations began to probe the usefulness of American fortification. The results of one investigation were submitted to Secretary of War John B. Floyd in 1859. The report noted that more than $30 million had been spent thusfar to establish a still incomplete system of fortification, plus $2 million per annum in repairs over the previous five years. The Board of Engineers had estimated $40 million more was needed to complete the system, and the report noted that this figure would be more than doubled by inflation in a few years (Morton, 1859, 3-10). All this was for a system originally estimated to cost no more than $18 million.

It is my firm conviction that to spend any such amounts as the above for American fortification is extravagance and waste (Morton, 1859, 10).

Morton proposed that the nation stop construction of stone and masonry forts of all kinds, and replace them with less expensive trenches and earthen forts. His arguments expressed the view of many Americans that each generation should build and pay for its own defense. Morton also argued that the forts built over the previous decades were too complicated and too small to be defended by the militia for which they were supposedly designed, and that they strengthened the requirements for

the Regular Army, rather than reducing those require-
ments (Morton, 1859, 8-10). Morton argued that forti-
fication in America should be based on a plan:

> . . . which is essentially opposite from those
> followed in Europe. Our militia is not expected
> nor wanted to leave their homes during war. They
> are constantly ready to take up arms in the defense
> of the city or district they belong to.
> . . . Our military history, from Bunker Hill
> to New Orleans, is sufficient proof that with the
> aid of earth entrenchments, to compensate for their
> incomplete discipline, such troops would not be
> found an insufficient reliance (Morton, 1859, 70).

The arguments about fortification had been complete-
ly reversed. The militia was the basis for Bernard's
system, but now the militia was used as an argument
against that system. As fate would have it, the doubts
about French style fortification were settled by war,
not by deliberation.

The End of an Era

The American Civil War proved the obsolescence of
the stone and masonry fort before Bernard's system could
be completed. With the war came modern artillery capable
of shattering the walls, while high angle mortars dropped
heavy explosives over the walls and into the interior of
the forts. Iron plated ships reduced the traditional
superiority of land fire-power over that of ships.
These were all weapons designed and tested in Europe's
endless wars, but it was in America that they first
proved themselves on a large scale (Fieberger, 1916,
46-52).

The Civil War proved not only the obsolescence of
the technology of the stone and masonry fort, it also
proved to Europe that the United States was capable of
fighting a major war.[1] After Gettysburg the powers of
Europe no longer seriously contemplated an invasion of
America (Ketchum, 1960, 249-253). The reason for coastal
fortification had largely disappeared along with the
prevailing technology, but the concept of coastal forts
hung on for another eighty years. Very little was done
to repair the old forts. Technology was changing too
rapidly in an industrializing world, and Americans did
not want to spend money on new forts that might again
become obsolete in a few years. While Europeans began
remodeling their forts, Americans retreated into the
practice of making detailed plans in peacetime, while
counting on enough time to build defenses when war
was imminent (Fieberger, 1916, 70-76). Appropriations
for construction and repair of the forts ceased after
1875, and in 1879 Congress passed a law limiting any
expenditures on the forts to protection, preservation,
and minor repairs (Annual Report of the Secretary of
War, 1880, vol. 2, part 1, 18-54) (see table 1).

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[1]For an excellent first-hand account of the
devastating effect that the weapons of the Civil War
had on stone and masonry forts see Viktor E. K. von
Scheliha, A Treatise on Coast-Defense (Westport, Conn:
Greenwood Press, reprinted in 1971). Scheliha was a
Confederate artillery officer during the war. He de-
scribed the efforts of the forts' occupants to deal with
the problem by rebuilding the walls with sandbags.

In 1881 the United States Army Board of Engineers
reported to Congress that any further improvement of
existing forts was useless. Instead, it was deemed
advisable to remove most of the guns from the old forts
and place them in dispersed battery positions. Such
dispersed positions would provide smaller targets to an
attacking fleet, and would be less expensive than trying
to repair the old forts and convert them to meet the
requirements of new weapons (see figure 15) (Lincoln,
1881, 6).

Another board was convened in 1886 at the request
of Congress and headed by William C. Endicott, Secretary
of War. This board upheld the findings of 1881 and
declared the stone and masonry forts obsolete:

> Without enlarging upon this subject, it
> suffices to state that the coast fortifications,
> which in 1860 were not surpassed by those of any
> country for efficiency, either for offense or
> defense, . . . have, since the introduction of
> rifled guns of heavy power and of armor plating
> in the navies of the world, become unable to cope
> with modern iron or steel-clad ships of war; far
> less to prevent their passage into the ports
> destined for attack (Endicott, 1886, 5).

The age of the stone and masonry fort was over.
Fortification continued to be considered in defense
planning for America's coasts, but it never attained
its former glory. After 1890 appropriations were resumed
under a Board of Munitions and Fortifications. The
responsibilities of this board included the dispersal
of gun positions, the testing and selection of new
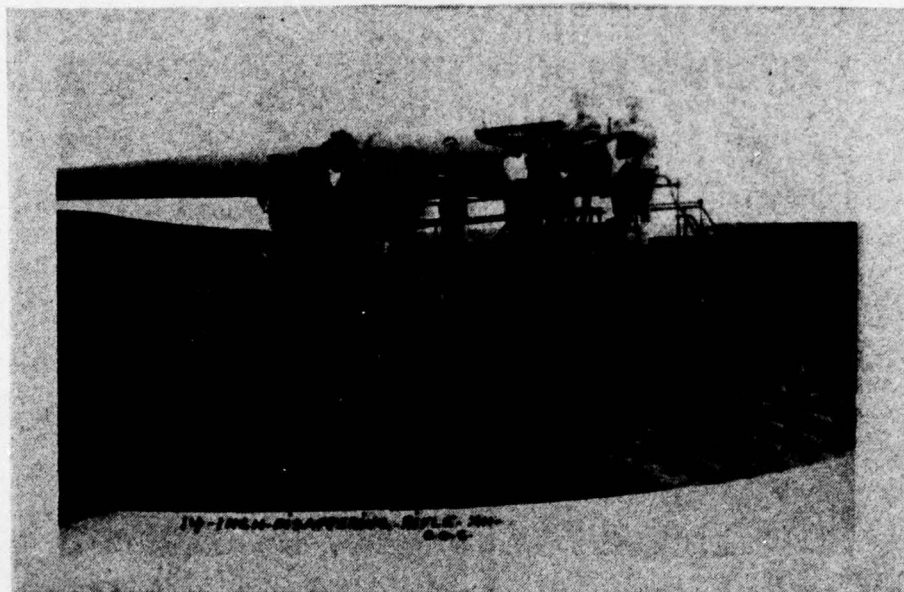
Figure 15.   Battery Positions at Fort Monroe, Virginia
in the Early Twentieth Century. These
fourteen-inch guns were mounted away from
the old fort in concrete and steel
foundations. Their disappearing
carriages, which allowed the guns to
be raised above the wall for firing,
were only one of many innovations used
after the Endicott Board's decision in
1886.

SOURCE: From the family of Captain
Harry Windsor Pease, United States Army
Coast Artillery, who served at Fort
Monroe from 1917 to 1919.

guns and gun carriages, and the integration of under-
water mines and torpedoes for coastal defenses. America's
coast artillery units were spread out in numerous small
forts and positions (see maps 11 through 16, 1890-1940).
During World War II many of the positions erected were
never even named. Maps 11 through 16 reveal that many
of the old stone and masonry forts remained active
through World War II. This was as much a legacy of the
past as anything. The guns of the old forts were
silenced and removed long before the forts became
inactive. The usefulness of the posts lay in the fact
that they provided housing for the men used in the
dispersed gun positions. Fort Monroe, Virginia remains
active even today (1979), but its usefulness is certainly
not in coast defense.

Confidence in any kind of fixed coastal fortifi-
cation ended in World War II. The invincible Maginot
Line of France was outflanked by the Germans in 1940, and
the forts of Belgium were captured by airborne assaults.
Hitler's Atlantic Wall was breached in a matter of hours
during the Normandy invasion, and the futility of fixed
fortification was proven. In the days of rockets, air-
planes, and highly mobile field armies, permanent forti-
fication had no place. America's coast artillery units
were disbanded in 1949, and efforts at fortification
were reduced to underground missile silos and command
posts (Hogg, 1975, 133-152).

The death of the stone and masonry fort closed the first chapter in the evolution of American Army posts. Before 1900 arrived it was no longer common for American soldiers to sleep in the damp and dark casements of America's coastal forts. But even before the stone and masonry fort began its slow death after the Civil War, a new type of Army post was reaching its peak in the semi-arid lands of the American West. The frontier Army post blossomed in all its legendary glory to provide another picture of American culture in a new environment.

CHAPTER III

FRONTIER ARMY POSTS

Physical and Cultural Environments

Origins of the Frontier Fort

The frontier forts of America did not begin in the
Wild West. Like the stone and masonry forts of the East,
the architecture of early American frontier forts came
over the Atlantic with the European colonists.[1] In the
last chapter it was noted that many of the early forts
in the New World were built of earth and wood. They
were often the precursors of stone and masonry forts,
such as the Castillo de San Marcos, but just as signifi-
cantly, they were the first frontier forts in America.[2]

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[1]Nor did frontier forts begin with the European
immigrants to America. The Roman forts that planted
the seeds of many European cities were frontier forts
in a manner very similar to those in America, except
that the Roman frontier was stationary, and the forts
were simplified versions of stone forts in Italy. A
closer parallel to the American frontier fort might be
the British fort on the moving frontier of the Empire.

[2]The Castillo de San Marcos was a frontier fort in
its own right. It was a wood and earth fort before it
was a stone fort (Robinson, 1977, 15-17). In fact,
most of the forts built in America by the European
powers were frontier forts in a true sense of the word.
North America was part of the European frontier when
it was settled. The American frontier was simply an
extension of the European frontier.

These forts were simplified versions of Europe's
fortresses. American stone and masonry forts returned
to the complex styles of European fortresses, while
frontier forts continued to regress into less complex
forms and functions (Robinson, 1977, 133-134). With
few exceptions (to be addressed later), frontier forts
continued to become more simple throughout their march
across the continent.

A Response to Environment

The frontier forts of America were built in response
to changing functions in changing political and physical
environments. Stone and masonry forts were able to
evolve on the coasts, because the coasts constituted a
fixed boundary. They became complicated and awesome
structures, because they were meant to defend against the
advanced powers of Europe, and because they symbolized
American determination to do just that.

On the other hand, the western frontier of America
was not a fixed boundary. Frontier forts were forced to
move with the ever-advancing settlers, and they seldom
lasted for any extended periods of time. Their major
competition came from primitive physical and human
environments, rather than from European armies. Indians
lacked the organizational structure needed to wage long
and complex sieges in the manner of Vauban. They also
lacked the artillery weapons and explosives that had

helped to create the need for modern stone forts.
On very few occasions were the Indians able to bring
together large enough numbers to overwhelm even the
smallest forts, and the Indians of the Great Plains
seldom even tried.

Even when the Indians joined the French or the
English as allies, war on the frontier was not waged in
traditional European fashions. Few cannon were used,
partly because they were too bulky to transport over
great distances along narrow trails. Battles were fought
on a small scale, with neither side employing large
armies. Without cannon and adequate forces, even
Europeans were unable to carry out complex siege
operations on the frontier. Additionally, the wars
fought by Europeans in America were of secondary impor-
tance to those fought in Europe. They did not command
the same resources in manpower and material, yet they
were fought over a much larger area. Even sophisticated
Europeans found the earth and wood fort to be adequate
throughout much of America.

The Nature of the Environment

The first environment encountered by pioneers and
settlers in America was not altogether physically
different from that of Europe. Both were forested
environments, and both were temperate and humid. Al-
though the elements varied in degree from Europe to

America, both environments were similar enough to allow most Europeans to adapt to the physical setting without too much difficulty (Brown, 1948, 7).[1]

The human inhabitants of this environment were semi-nomadic Indians. They lived in small bands that farmed and hunted an area until the soil began to weaken, and then they moved on. Since it was easier to subsist in small groups, the Indians seldom joined together in large tribes except to make war on neighboring tribes. There were a few powerful tribes, but most of them were small. The Indians preferred a guerrilla war of terror and small raids, but they sometimes fought in larger groups, and they sometimes allied themselves with competing French, Spanish, English, and Americans (Billington, 1967, 33-211).

Generally, the further one moved across America, the less humid it became. Trees began to give way to prairies in Illinois, and further west the tall prairie grass surrendered to the short grasses of the Great Plains. Until the time of the Civil War, much of the Great Plains and the Southwest was simply referred to as the Great American Desert (Brown, 1948, 370-371). The semi-arid and arid lands of the Wild West raised new challenges and new problems about which the people

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[1]Also see Carl O. Sauer, "The Settlement of the Humid East," U. S. Department of Agriculture, Yearbook: Climate and Man (Washington, D. C.: U. S. Government Printing Office, 1941), pp. 157-166.

of a forested culture were unfamiliar.[1] In such a
radically different environment, Army posts took on
radically different roles and appearances.

The Indians of the Great Plains were significantly
different from those of the forested East. For one
thing, they were considerably more warlike. They
determined early that no intruders would be allowed easy
access to their lands. Like their eastern namesakes,
the Plains Indians were not well organized (despite the
existence of a universal sign language), and treaties
with one tribal faction might not be considered valid
by other factions, or even by individual warriors within
the same faction. Plains Indians were considered by
white settlers to be more devious and treacherous than
the Indians of the East, and thievery (particularly of
horses) was an honored tradition in many tribes. Unlike
the semi-nomads of the East, the Plains Indians were
completely nomadic, and they followed the buffalo in
order to obtain food and shelter. Perhaps the most
significant difference was that the Plains Indians
virtually lived on horses. They were excellent riders
and good warriors, and they learned early that their

[1]The classic treatment of America's confrontation
with the arid West is Walter Prescott Webb, The Great
Plains (Boston: Ginn and Company, 1931). Webb's
treatment of the Great Plains is both exciting and
thorough.

very existence depended upon the ability to keep the
white man from ravaging the land and destroying the
buffalo (Webb, 1931, 47-68).

The varying physical and human environments of the
frontier affected the way Americans and their Army func-
tioned. Different means were employed to handle differ-
ent conditions.

The Frontier Army

The image of the frontier has been a source of
pride to Americans, and it has been given credit for
qualities that perhaps it never had. Some scholars have
even attributed much of the success of American democracy
to the frontier.[1] Whether one wishes to accept such
arguments or not, it is certainly obvious that the
frontier was important to many people, and it may still
have some effects on the attitudes of the American
people.

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[1]In 1893 an American historian named Frederick
Jackson Turner read an essay entitled "The Significance
of the Frontier in American History" before a meeting
of the American Historical Association. For many years
Turner's work was hailed as a revolutionary and profound
doctrine, and the frontier was credited with qualities
that explained much of American development. In the
1930's and 40's Turner and his followers were the object
of a scholarly backlash that threatened to send all of
Turner's ideas into obscurity. In recent years Turnerian
ideas have enjoyed somewhat of a revival, although the
new supporters consider themselves more objective than
the original disciples. See George Rogers Taylor, ed.,
The Turner Thesis; Concerning the Role of the Frontier
in American History (Lexington, Mass.: D. C. Heath and
Company, 1956).

If the frontier was important to Americans, it was certainly important to the Army. A very large portion of the Army spent a great deal of time on or beyond the frontier. Just prior to the Civil War, 181 of the 198 companies of the Regular Army were involved in conflicts with the Plains Indians (Hart, 1967, 11). As late as 1890 more than two-thirds of the Army was still west of the Mississippi River (Frazer, 1963, xix). Maps 1 through 11 (1790-1890) provide an indication of just how large of a role the frontier played during the formative years of the Army, particularly after 1850. With few exceptions, notably the Civil War, the American Army was a frontier Army, until there no longer was a frontier.

The Role of the Frontier Army

Only one day after the Army had been reduced in 1784 to eighty privates and a few officers, Congress reversed itself and passed an act creating the First American Regiment. The act authorized the enlistment of seven hundred soldiers for twelve months under the command of Lieutenant Colonel Josiah Harmar, a native of Pennsylvania (Dupuy, 1961, 44-45). The purpose of Harmar's regiment was to secure the Northwest Terriroty and establish peace with the Indians, who were moving steadily toward allegiance with Great Britain. The act provided the Army with its first and most difficult role

on the frontier as the government's Indian agent. For
the duration of the frontier, the Army acted as the
interface between the settlers and the Indians. It made
treaties with the Indians, and then it tried to enforce
those treaties. In the final analysis, the Army became
the reluctant agent of the frontier population. It
fought the Indians, forcibly removed many of them from
their lands east of the Mississippi River, and eventually
destroyed them. This may not have been the most pleasant
task of the frontier Army, but it was a task that set
the stage for much of what happened to the frontier Army
posts. In the words of General Sheridan in 1868:

> The Army has nothing to gain by war with the
> Indians; on the contrary it has everything to lose.
> In such a war it suffers all the hardships and
> privations, exposed as it is to the charge of
> assassination if the Indians are killed, to the
> charge of inefficiency if they are not; . . .
> (quoted in Dupuy, 1961, 150).

Indian fighting might have been the most legendary
job of the frontier Army, but there were many other
important jobs that kept most of the Army on the frontier.
Thomas Jefferson was certainly not an admirer of the
Regular Army, but he saw it as a tool to use in the
development of the American West. He sent Captain
Meriwether Lewis and Lieutenant William Clark with a
detachment of soldiers on their epic journey to the
Pacific, an act that set the stage for the Army as a
team of explorers and mapmakers. When he approved the
establishment of a military academy at West Point, it

was the only engineering school in the nation. Its
graduates built roads, surveyed railroads, and helped
to make the interior rivers navigable. Throughout the
nineteenth century, commanders complained that they
had too few officers to properly train and lead their
soldiers, because so many officers were on detached duty
performing civil engineering functions (Weigley, 1967,
106).[1]

Isolation of the Frontier Army

Thomas Jefferson utilized the Army for many civil
functions. The fact that most of the jobs were in the
sparsely populated territories of the frontier and
beyond was a notable feature. During the administration
of President Jefferson, the Army moved further away from
the mainstream of American culture. Physical isolation
gave the frontier Army greater opportunities for psycho-
logical isolation, something Americans had feared from
the beginning.

Professional organizations have a natural tendency
to isolate themselves from others, and the Army was no
exception. The War of 1812 revealed many weaknesses in
the nation's militia. The Regular Army blamed many of

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[1]Colonel Joseph K. F. Mansfield conducted an in-
spection of the western posts in 1853-54. Throughout
his inspection report to the War Department, he made
references to the number of officers on detached duty.
See Robert W. Frazer, ed., Mansfield on the Condition
of Western Forts, 1853-1854 (Norman, Oklahoma: University
of Oklahoma Press, 1963).

its own casualties, and the embarrassment of the nation,
on the inability or unwillingness of the poorly trained
militia to fight in particular situations (Weigley,
1867, 131). The war provided the Army with a major
impetus toward isolation from American civilian society
and a breakdown of the reliance on amateur militia. It
also resulted in a strong Secretary of War, John C.
Calhoun, who was able to push the development of West
Point as a school to train professional officers as well
as engineers. The officers graduating from West Point
obtained increasing control within the Army as the
nineteenth century proceeded, and the Army became more
professional (Weigley, 1967, 133).

Coupled with the traditional American distrust of
the military, these factors could only have been multi-
plied by the physical isolation of the frontier Army.
Professionally trained officers naturally felt a lack
of appreciation on the part of an anti-military and
individualistic civilian population. Together with the
loneliness and desperation that they felt on "the
isolated post amongst merciless foes" (U. S. War Depart-
ment, 1870, 199) with an Army too small for the job,
dealing with savages and uncouth frontiersmen, these
were ingredients for strong military isolationism
(Weigley, 1967, 157).

The Army and the Frontiersmen

As the frontier spread further from the Atlantic coast, many established Easterners grew increasingly suspicious and disdainful of frontiersmen. It was a situation similar to the contempt felt by many conservative Europeans toward the original immigrants to America. Timothy Dwight, president of Yale from 1795 to 1817, was upset at the poor image that Americans had in Europe. He blamed America's image of lawlessness, ill manners, and selfish individualism on the frontiersmen, whom he described as:

> . . . too idle, too talkative, too passionate, too prodigal, and too shiftless to acquire either property or character. They are impatient of the restraints of law, religion, and morality; grumble about taxes by which rulers, ministers and schoolmasters are supported; and complain incessantly . . . . Although they manage their own concerns worse than any other men, feel perfectly satisfied that they could manage those of the nation far better than the agents to whom they are committed by the public (quoted in Adler, vol. 4, 1968, 279).

In all probability Timothy Dwight seldom had to deal directly with the frontiersmen he so heartily disliked. The Army had to deal with them every day. Hunters and traders smuggled whiskey and weapons to the Indians in order to get their furs. Agents of land speculators plied the Indians with whiskey to get their lands. Settlers squatted on Indian lands in defiance of treaties made by Army officers with the Indians.

Many Army officers were trained at West Point in the traditions of honesty and good faith in one's

promise, even to Indians. Treaties made with the Indians were usually made in good faith, and many officers certainly felt these treaties were personal promises. <u>A cadet does not lie, cheat, or steal</u>. That was (and still is) one of the basic elements of the code of honor taught to future officers at West Point. A treaty broken by white frontiersmen was not only a breach of a promise made by the government, it was also an affront to the self-respect of the Army officer. It did not endear the Army officer to the frontiersmen.[1]

Evidence of the Army's contempt for the frontiersmen could be found in the manner that officers referred to them. Many frontiersmen were employed by the Army as mule drivers and wagon handlers. Colonel Mansfield continually made disparaging remarks against the profanity used by civilian mule drivers during his inspection tour in 1853-54 (Frazer, 1963, 31). Army officers frequently blamed the high desertion rates common on the frontier to the evil attractions of gold, prostitutes, and whiskey. One officer expressed his dismay at the frontier employees of the Army during a march to Oregon

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[1]An excellent account of the settlement of the American frontier, and its numerous problems, is contained in Ray Allen Billington, <u>Westward Expansion; A History of the American Frontier</u>, 3rd ed. (New York: The Macmillan Company, 1967). Throughout his book Billington made references to the interface between the Army, the pioneers, and the Indians.

in 1849:

> The drivers were not only stupid, but totally
> ignorant of their duty, . . . and seemed to have
> no other object in view than to reach the gold
> region with the least possible expense or trouble
> to themselves; . . . (Annual Report of the Secretary
> of War, 1850, 124).

The opinions of Timothy Dwight were obviously
shared by many Army officers who served on the frontier
until the end of the nineteenth century. Such opinions
could not help but influence the posts those officers
established.

Paradoxes of the Frontier Army

If Turner was right, it would seem that the frontier
Army should have become more democratic and individual-
istic than its Eastern counterpart. In fact, there was
evidence of growing individualism in the Army, but there
were many paradoxes as well.

The Army began as an autocratic society, and in
many respects it became even more autocratic on the
frontier. The West Pointers who gained increasing
control of the Army were trained in the principles of
traditional European armies, whose officers were aristo-
crats and members of the gentry. The War Department was
also strengthened by Secretary Calhoun in the years
following the War of 1812, thus providing a framework
for centralized control of the Army from Washington
(Weigley, 1967, 134-139).

The frontier Army was a representative of the government. It helped to control and direct the development of the frontier along the lines dictated by the government, and since the power of government was primarily in the more populated East, the Army largely represented the established views of the East.[1]

On the other hand, physical isolation of the frontier Army and distance from Washington worked to prevent effective control from the nation's capital. Jealousies between the War Department and territorial commanders further reduced that control and tended to make the Army more independent. Officers of the frontier Army were able to establish a fairly large degree of independent control over their units, and here the individuality of the frontier began to exert itself

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[1]Even during the reign of Jacksonian democracy, much of the Army's officer corps retained the establishmentarian views of the East. Clashes between President Jackson and the War Department were frequent. At one point the legislature of the President's home state of Tennessee issued a proclamation calling for the dissolution of West Point on the grounds that the Academy was opposed to democratic principles (Weigley, 1967, 153-156). Despite the friction between the professional officers of the Army and the elements of Jacksonian democracy, the Army was still bound to comply with orders from the government. It was during this era that the Army was used to forcefully evacuate Indians of the Five Civilized Tribes (Creek, Cherokee, Choctaw, Chickasaw, and Seminole) from their lands east of the Mississippi River to present day Oklahoma (U. S. National Park Service, 1963, 3). The policy of evacuation certainly favored Jackson's frontier constituency more than anyone in the East (except perhaps the land speculators), since frontiersmen obtained the vast majority of lands that were opened by the evacuation.

on the Army.[1] This individuality was further enhanced
by the poor conditions of frontier life, which forced
units to forage for food and supplies with little help
from the War Department. The scattered nature of the
Army and the small unit tactics of guerrilla warfare
against the Indians also played a large part in reducing
centralized control over the Army. An indication that
Washington's control over the Army weakened as the
frontier expanded was provided in the annual reports of
the Secretary of War. By 1860 the War Department was
willing to concede that "the military expenditures in
these distant departments cannot be controlled here"
(Annual Report of the Secretary of War, 1860, 325).
When money could not be controlled, this was a sure
sign that other things were slipping as well.

General Characteristics of Frontier Army Posts

The attitudes of the American people, the Army,
and the elements of the frontier were all reflected in

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[1]The history of the Army is filled with confronta-
tions between the War Department and troop commanders.
One of the first confrontations with the frontier Army
was between Secretary of War Crawford and General
Andrew Jackson, during the years immediately following
the War of 1812. Jackson, who has already been mentioned
as a strong anti-militarist while President, resented
Crawford's attempts to control administration of the
Army from Washington. Jackson finally went around
Secretary Crawford and complained to President Monroe.
He was soundly rebuked for his efforts, but Jackson's
individualism was only one example of many that occurred
on the frontier and in the later Army (Weigley, 1967,
135-136).

the posts of the frontier Army. According to Robinson
(1977, 133) there was "no type of fortification, system
of building, or style of architecture that was univer-
sally adaptable to the diverse conditions encountered."
Very little argument could be brought against such a
statement, but several qualifications could be made.
There were, for instance, several general characteristics
about frontier Army posts in the United States that
distinguished them from other posts.

Size of Frontier Posts

One of the general characteristics of Army posts
during the era of the frontier was that they were small.
Except for a brief period around 1840, the average size
of Army posts throughout the country remained below two
hundred soldiers until late in the nineteenth century
(see table 2). Considering the fact that Fort Monroe
and some other large coastal forts required as many as
six hundred soldiers in peacetime (Robinson, 1977, 99),
the average size of the frontiers posts was even smaller
than that represented in table 2.

A few posts in the interior of the country obtained
larger sizes. Jefferson Barracks, Missouri was one of
these posts. It frequently had a full regiment of troops
(approximately five hundred to eight hundred troops,
depending on the strength of the regiment). Jefferson
Barracks, however, was not a typical frontier post.

TABLE 2

ESTIMATED NUMBER OF ACTIVE ARMY POSTS AND THEIR AVERAGE TROOP POPULATION, 1803-1963

Year	Number of Active Posts	Average Population	Year	Number of Active Posts	Average Population
1803	35	71	1885	121	224
1824	48	124	1890	111	247
1825	41	144	1895	81	339
1830	42	146	1900	81	1256
1835	53	138	1905	140	482
1840	49	251	1910	138	589
1845	56	152	1915	172	621
1850	100	109	1920	202	1011
1855	89	179	1925	211	649
1860	86	188	1930	205	680
1865	Not Available	-	1935	220	634
1870	199	187	1940	175	1537
1875	175	152	1963	112	8713
1880	163	157			

SOURCES: Matthew St. Clair Clarke and Walter Lowrie, American State Papers: Documents, Legislative and Executive, of the Congress of the United States, vols. 7 and 8: Military Affairs (Washington, D. C.: Gales and Seaton, 1832) pp. 35 and 846. U. S. War Department, Office of the Secretary of War, Annual Reports of the Secretary of War (Washington, D. C.: U. S. Government Printing Office, published annually from 1822 to 1947); U. S. War Department, Office of the Adjutant General, Army List and Directory (Washington, D. C.: U. S. Government Printing Office, published biannually from 1900 to 1940); Tom Scanlan, ed., The Army Times Guide to Army Posts (Harrisburg, Pa: The Stackpole Company, 1963).

Located just south of St. Louis, Jefferson Barracks had
been passed by the frontier before it was even established
in 1826 (see map 5, 1830). It served as an important
receiving and shipping point for troops and material
enroute to and from the frontier. Its large troop force
was used as a reserve that could be rushed to crisis
areas anywhere along the frontier. In short, Jefferson
Barracks performed the role of a parent post to many of
the smaller posts on the frontier (Scanlan, 1963, 111).

The typical frontier Army post usually had one
company of troops (less than one hundred soldiers in
those days), and seldom had more than a battalion of
three companies. The small size of the Army and the
immense territory to be patrolled made it inevitable that
the Army would be scattered in small units across the
land. The unacceptable alternative was to leave huge
areas completely unpoliced.

> In order to make troops available as possible
> for the protection of the settlements, they have
> been separated into small detachments, stationed at
> various points along the frontier (Annual Report of
> the Secretary of War, 1850, 4).

Table 2 indicates that the larger forts of the era
occurred around 1840, while the smallest forts occurred
around 1850. The first date was significant, because it
was the period just before the Mexican War. The second
date was immediately after the war. Between the War of
1812 and the Mexican War, settlement moved rapidly down
and across the Mississippi Valley, particularly in the

South. The northern frontier advanced more slowly, largely because the Great Plains extended further to the east in that area (Webb, 1931, 27-33). The government soon decided to leave the unappealing lands of the Great Plains to the Plains Indians, and even to give the fringes of such land to the Eastern Indians in exchange for their more fertile lands. With the support of President Jackson and the frontiersmen, Congress passed the Indian Removal Act of 1830, a program which resulted in the forcible eviction of more than 80,000 Indians to lands across the Mississippi. The Indian Trade and Intercourse Act of 1834 defined Indian Country as all lands west of the Mississippi, excluding Louisiana, Arkansas, and Missouri. Indian Country was reduced to the area of present Oklahoma in 1838. In the era prior to the Mexican War, the edge of the Great Plains was sometimes referred to as the "Permanent Indian Frontier" (U. S. National Park Service, 1963, 3). The 1834 law forbade white men from dealing with the Indians or going on their lands without special permits (U. S. National Park Service, 1963, 3-9).

The effect of the permanent Indian frontier on Army posts was to allow the posts to stabilize and grow. A string of forts grew between the white settlements and the Indians, and many of these posts took on a permanent character. Such places as Fort Gibson, Fort Smith, Fort Leavenworth, and Fort Snelling remained active posts much

longer than most frontier posts. The stability of the
frontier allowed a reduction in the number of posts, and
each post was subsequently larger (see table 2). Once
the frontier passed them, many of these posts performed
roles similar to that of Jefferson Barracks. Expeditions
were sent from them to establish outposts in the Plains,
or they served as quartermaster depots for supplies and
troops moving to the frontier.[1]

While white settlers began moving across the Oregon
Trail as early as 1842, the migrations were small compared
to those in the years following the Mexican War. The
defeat of Mexico broke the Southern Plains barrier by
bringing the Southwest into the United States. It also
brought California and the California Gold Rush to the
American West. The flood of settlers that followed not
only destabilized the existing frontier, it exploded
across the Great Plains through the midst of hostile
Indians. The simmering conflicts between the Plains
Indians and the encroaching settlers grew into a constant
war that lasted until the last tribe was defeated. It
was interrupted only by the Civil War.

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[1]The subject of Indian affairs, together with dis-
cussions of Fort Gibson and other posts of the permanent
Indian frontier, receives considerable attention in
Grant Foreman, Advancing the Frontier, 1830-1860 (Norman,
Okla.: University of Oklahoma Press, 1933). For de-
scriptions of many western posts and their functions see
Robert W. Frazer, Forts of the West (Norman, Okla:
University of Oklahoma Press, 1965).

The effect of this major activity on the Army was to make most of the existing posts considerably less important. More posts were needed along the Pacific coastal areas, the Southwest, and across the Great Plains. The Army was actually smaller in 1850 than in 1840 (see figure 1), and the population of Army posts was considerably smaller than at any other time in the frontier era.

Locations of Frontier Posts

Like most things that related to the movement of people, goods, and services; the locations of frontier Army posts depended upon routes of communication and transportation (Robinson, 1977, 160). Maps 1 through 11 (1790-1890) provide a graphic illustration of the numbers and locations of Army posts through the frontier era. The number of posts on and beyond the frontier is the most obvious feature of these maps, especially after 1850. A second feature that is noticeable despite the lack of physical features on the maps is the number of posts east of the Mississippi River that were located on rivers. Until the Civil War and the widespread use of railroads, the Army (like everyone else) continued to depend primarily on water transportation to move people and supplies:

> Prior to 1845, our frontier posts were all estab-
> lished either on the Gulf of Mexico, on Lake Superior,
> or on the Headwaters of the Mississippi and its trib-
> utaries. They were all, therefore, accessible by

water, and many of them situated in the midst of a fertile and cultivated country (Annual Report of the Secretary of War, 1850, 8).

Movement into the arid West and away from water systems created some serious problems, because it meant that people and supplies had to be transported overland. Railroads did not become an effective system in the West until well after the Civil War. This meant that supplies and people had to move by horse and wagon, and roads had to be built at considerable expense. Table 3 provides some indication of the increased costs in transportation as one moved from east to west across Texas and the Southwest in the early days of the Wild West.

TABLE 3

COSTS OF TRANSPORTING PORK AND FLOUR FOR
THE ARMY, 1850

Destination	Cost of Pork (per barrel)	Cost of Flour (per barrel)
Nearer posts in Texas . . .	$8.00	$5.30
Santa Fe and Las Vegas, New Mexico	32.00	21.50
Taos, Socorro, and Abique, New Mexico . . .	41.60	27.56
Paso del Norte, Texas to San Elizario and Dona Ana, New Mexico . .	48.00	31.80

SOURCE: U. S. War Department, Annual Report of the Secretary of War, 1850, p. 5.

The locations of posts on the Pacific coast continue to depend on water transportation. In the Northern Plain

the Missouri, Yellowstone, and North Platte Rivers at
least provided fairly dependable water sources for wagon
trains. In the Southwest, however, the only rivers of
any consequence were the Rio Grande and the Colorado.
Several posts used the Rio Grande as a communications
link, and Fort Yuma became a major supply point because
of its location at the head of navigation on the Colorado
River (Frazer, 1965, 35). Posts that could not be located
directly on a water source were established as near to
one as was feasible. The Army built many posts deep in
the wilderness, and particularly in the arid West the
sites were selected more on the basis of available food,
water, and building materials than on any concern for
defensible positions (Hart, 1967, 12). Fort Marcy, New
Mexico was one major exception to this rule. Built on
a defensible knoll, it was described by Colonel Mansfield
in 1854 as the only true fort in the entire territory.
Perhaps naively (Mansfield had recently arrived from
Washington), he suggested that the guns of the fort
would make up for any deficiency in water (Frazer, 1963,
19-20).

The mission of the Army also played a more subtle
role than simply keeping the Army in the wilderness.
Originally, the frontier Army served as a buffer between
the Indians and the settlers, and its job was to protect
the Indians from the settlers as much as to protect the
settlers from the Indians. This was especially the case

after the Five Civilized Tribes were forcibly removed to
the Indian Country. The posts of Fort Gibson, Fort
Snelling, and others spent as much time chasing white
smugglers of whiskey and weapons as they did fighting
Indians (Foreman, 1933, 32). The result was that most
posts were located just beyond the frontier and not very
deep into the wilderness until about 1845.

When the Great Plains barrier burst and people
streamed across to the west, the Army could no longer
provide an adequate buffer. Instead, it tried to protect
the major trails and settlements (see maps 7 and 8, 1850-
1860). As the Indians grew more hostile and aggressive,
the Army soon took a more active role than mere defense
of the settlers. It began to actively seek the Indians
in an effort to destroy their will to fight. By 1850
some officers were expressing the idea that the best way
to control the Indians was to pursue them deep into the
wilderness, establishing Army posts far from the major
trails and settlements (Frazer, 1963, xix).

The active pursuit and destruction of the Plains
Indians represented a major change from the belief that
the arid West would always belong to the Indians. Maps
8 through 10 (1860-1880) reflect that change, particularly
after the Civil War. The movement of Army posts away
from the towns, however, was caused by more than a desire
to pursue Indians. A report was submitted in 1851 by one
staff officer blaming the high costs of the Army on the

policy of stationing troops in rented or leased quarters in some of the towns. The report suggested that the towns should be able to defend themselves with local militia (Frazer, 1963, xix). Considering the small size of the Army in relation to the territory it had to cover, the proposal was not unrealistic. The use of local militia for defense might have reduced costs, and it would have certainly released more of the Army for active pursuit of the Indians. As an important side effect, it would have further isolated the Army from society.

By 1850 the frontier Army had been physically isolated from the bulk of society for some time. It had also grown increasingly professional under the control of West Point officers. Its natural alienation from society was further compounded by the Army's relationships with the frontiersmen. These factors finally led to an outspoken desire by some influential Army officers to isolate Army posts from the frontier towns. Colonel Edwin W. Sumner, commander of troops in the New Mexico Territory, announced in 1852:

> I consider the withdrawal of troops from the towns, a matter of vital importance, both as it regards discipline and economy. It is unquestionably true, that most of the troops in this territory have become in a high degree demoralized, and it can only be accounted for by the vicious associations in those towns. These evils are so great, that I do not expect to eradicate them entirely, until I bring the troops together, in considerable bodies, for discipline and instruction (quoted in Frazer, 1963, xvii).

Colonel Sumner was not able to bring the soldiers together "in considerable bodies" (quoted in Frazer, 1963, xvii), but he was able to relocate them from the towns into the wilderness. His decision met with War Department approval when Colonel Mansfield made his inspection tour in 1853-54, and Mansfield even suggested that similar steps be taken throughout the Army (Frazer, 1963, xxix). A professional Army that had for so long been shunned by civilian society now voluntarily extended its isolation.

The Army's disdain for the frontiersmen (and perhaps, to a lesser degree, even other undisciplined civilians) may have even been stronger than society's distrust of the Army. Most localities were more than willing to accept troops for their economic value (small as it was) and their protection, and camp followers continued to settle near Army posts in the wilderness. Colonel Sumner may have been able to separate the troops from the towns, but he certainly could not keep the towns from following the troops. The Army's reservation system, whereby large tracts of land were laid aside for training at each post, became the frontier Army's last resort at keeping the evil influencies of the frontier away from the soldiers.[1]

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[1] For a review of the early laws of military reservations see Jaspar W. Johnson, A Digest of the Laws of Military Reservations (Washington, D. C.: U. S. Government Printing Office, 1879).

Reservations were made off-limits to squatters and
civilian establishments (except the post sutler). This
policy led to the growth of settlements just outside of
the reservation, and out of reach of military law. Small
establishments known as "hog ranches" (Hart, 1963, 32)
offered whiskey and women to soldiers in the middle of
the wilderness. The enforced separation of civilian and
military societies became an institution on the frontier.
Perhaps the hard feelings have never been healed.

Temporary Quality of Frontier Posts

Like just about everything else on the frontier,
most Army posts were temporary in nature. The large
majority of them lasted fewer than ten years, and several
were abandoned within days or months of their founding.
A single campaign against the Indians measured the
existence of many, and the largest number of them were
built between 1868 and 1880 (Frazer, 1965, xiii). One
example of this tendency was in the present state of
Arizona, where after 1850 more than forty posts were
established. Only one of these, Fort Huachuca, remains
active today (Scanlan, 1963, 98), and many of them did
not remain active long enough to be represented on the
maps of this paper. Again there were exceptions to this
general characteristic, particularly in the posts of the
permanent Indian frontier. Posts that protected such
major routes as the Oregon Trail or defended the border

with Mexico also tended to remain in existence longer
than average (see maps 7 through 11, 1850-1890).

The frequent appearance and disappearance of Army
posts was one element related to the poor control of the
frontier Army by the War Department. Frontier posts
passed into and out of existence so rapidly that the
War Department was unable to keep track of the names,
locations, or designs. Attempts were made to rectify
the situation, but few of them met with much success
until the latter years of the nineteenth century. The
authority to name new posts was reserved to the War
Department in 1832. In theory, the term fort was re-
served for permanent posts, while the term camp was used
for temporary posts. In practice, local commanders
named the posts they established, and little regard was
given to the War Department guidelines (Frazer, 1965,
xxi-xxii). It was not until 1878 that the War Department
issued a new directive establishing the official policy
toward naming of Army posts:

> As the practice of designating military posts
> varies in the several Military Divisions, and in
> order to secure uniformity in this respect, Division
> [sic] commanders are authorized, at their discretion,
> to name and style all posts permanently occupied by
> troops, or the occupation of which is likely to be
> permanent, "Forts," and to style all points occupied
> temporarily "Camps" (quoted in Frazer, 1965, xxiii).

Appendixes 1 and 2 emphasize the frequency with
which frontier Army posts were designated as forts, even
though few of them met the quality of permanence desired

by the War Department. As will be shown later, even
fewer of these posts met the accepted definition of
<u>fort</u> as an abbreviation of <u>fortification</u>. On several
occasions more than one post was given the same name
during the same time period.

The temporary nature of frontier posts could not
be emphasized more than by the scarcity of records
associated with them. The government has long been
recognized as one of the best sources of information for
scholarly research. As an agency of the government, the
War Department was no less zealous about records than
any other agency. Yet, much of the historical knowledge
of frontier Army posts has been dependent upon the
memories and recordings of local settlers, and upon the
work of such enthusiastic travelers as Herbert M. Hart
(see footnote on page 22). The best government sources
of information were produced by the Surgeon General's
Office in the decade after the Civil War (see footnote
on page 23). In 1966 several historians and veterans
established a Council on Abandoned Military Posts in an
effort to even locate some of the old garrisons (Murray,
1969, 3).

Construction and Design of Frontier Posts
Folk Architecture?

The qualities of the frontier were reflected in the
design and construction of frontier Army posts. "All

these works were simple and primitive in construction.
. . . [They were] expedient and temporary affairs"
(Robinson, 1977, 140). Although their origins were
similar, the posts of the frontier varied much more
greatly in design than the stone and masonry forts, and
unlike the stone and masonry forts, official records of
the designs of frontier posts were scarce before 1870.
The War Department, in fact, apparently had no official
policy or doctrine before 1860 concerning the construc-
tion and design of posts other than for the stone and
masonry forts of the coastal artillery.[1] According to
the Surgeon General's report of 1870, the policies that
were published in 1860 were never issued to the units in
the field (U. S. War Department, 1870, xxi). The report
noted in frustration:

> As there is no law with regard to the arrange-
> ment of a post, or in what manner the buildings,
> the hospital excepted, shall be constructed, and
> as a cadet receives no special instruction in these
> points, an officer charged with the establishment
> of a new post usually copies the arrangement of one
> of the older posts with which he is familiar (U. S.
> War Department, 1870, xxv).

In other words, the frontier posts built by the
Army before 1870 were the closest that the Army would
ever come to folk architecture. Ever since the Revolution

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[1]Apparently, the first official publication intended
to organize and direct construction of Army posts in the
interior of the country was the U. S. War Department,
Regulations Concerning Barracks and Quarters for the Army
of the United States (Washington, D. C.: George W.
Bowman, Printer, 1860).

the government and the War Department had thought about
forts only in the context of fortification. The organ-
ization and architecture of the barracks and other
buildings were of little concern. They were built to
fit the requirements for fortification. On the frontier,
fortification became less and less important, until it
finally disappeared. The organization of posts and the
architecture of buildings grew in importance to planners.
Between the time that the first frontier posts were built
by the United States Army in about 1785, and the first
official building designs were released by the War
Department in 1873 (U. S. War Department, 1875, ix), the
construction and design of frontier Army posts were left
largely to local commanders.[1] Some of the builders
relied on experience and tradition to design their posts.
Some of them relied on ingenuity. All of them relied on
expediency. What these officers and men built told a
great deal about their military background and culture.
In this respect the frontier Army posts might well have
been some of the most important elements in the history
of the United States Army and the American frontier.

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[1]The reader is reminded of the discussion in
Chapter I about geographers and cultural artifacts.
Folk architecture has been especially interesting to
geographers, because it tells so much about the origins
of cultural groups. Frontier Army posts as examples of
military folk architecture are particularly intriguing.
The subject undoubtedly deserves greater attention than
can be rendered to it in a paper of this scope.

Palisades and Blockhouses

When Lieutenant Colonel Harmar's First American
Regiment moved into the Ohio Valley in 1785, it took
with it many principles of fortification that had been
practiced on the American frontier over the previous
150 years. In fact, practically all of the elements
of the frontier forts built east of the Mississippi
River had been developed before the American Revolution.
The simple rectangle with bastioned corners were features
of the earliest forts in colonial America. Wooden
palisades had replaced stone walls just as early. Even
blockhouses (see figure 16) had been used to some extent
prior to the Revolution (Robinson, 1977, 59).

Although Robinson (1977, 133) correctly pointed
out that no single style of architecture adapted to the
entire frontier, it was obvious that the palisaded fort
met the needs of the Army in the wooded East quite well.
The palisade and blockhouse were common features through-
out the densely forested regions. The semi-sedentary
life styles of the Indians allowed the Army to conduct
some semblance of traditionally organized warfare against
them. Campaigns could be planned behind the protective
walls of a palisaded fort with a reasonable expectation
that the enemy could still be found at the sites of
known villages.[1]

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[1]The history of Indian wars in the wooded East is
filled with classic examples of military campaigns

Figure 16.   Hendrick's Blockhouse, Pennsylvania.
Settlers as well as soldiers built
blockhouses for protection. In this
case, as in many others, the block-
house stood alone and was not part
of a larger fort. This blockhouse
was built before the Revolution near
Middlecreek, Pennsylvania. The sketch
shown here was made by the Pennsylvania
Indian Forts Commission showing the
remains of the blockhouse in 1896.

SOURCE: Indian Forts Commission,
Report of the Commission, vol. 1,
p. 618.

By the time Fort Harmar was built on the banks of
the Ohio River in 1785, wooden palisades were not longer
used only as supports for earthen parapets. Instead,
the palisade had become the principal fortification of
the frontier fort. Although Colonel Harmar did not
employ earthworks and parapets in his fort, he built it
in the shape of well known French designs. Indeed, it
was a wooden star fort. It was pentagonal in shape,
and although sources disagree as to whether it had
blockhouses or bastions on the corners, most sketches
show it with triangular bastions (see figure 17). At
least one source reported that Fort Harmar was built to
hold one thousand soldiers (Dupuy, 1961, 46). Since
Harmar's forces built other forts in the region (Dupuy,
1961, 46), and the Army consisted of fewer than seven
hundred soldiers (figure 1) before 1790, the likelihood
that Fort Harmar ever held more than five hundred
soldiers is remote. Even so, it was a large fort in
comparison to subsequent frontier forts.

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against Indians who were willing to stand and fight in
a somewhat organized manner. Mad Anthony Wayne trained
his men for two years before setting out to defeat the
Shawnee and Miami Indians at the Battle of Fallen Timbers.
It was known well in advance that the Indians would
defend at the site of their eventual defeat (Billington,
1967, 226)(Weigley, 1967, 92-93). The final campaigns
against Tecumseh's famous alliance began in 1811, when
William Henry Harrison took the opportunity of Tecumseh's
temporary absence to attack the large village of
Prophetstown. As expected, the Indians chose to defend
their ground in the conclusive battle at Tippecanoe
(Billington, 1967, 227).

Figure 17. Fort Harmar on the Ohio River, about 1785. This sketch of Fort Harmar shows it as a pentagonal fort with triangular bastions. Dupuy (1961, 46) described it as having two-story towers on each corner. The upper stories were used to mount cannon and the lower stories were used as officers' quarters.

SOURCE: Charles Moore, The Northwest Under Three Flags, 1635-1796 (New York: Harper and Brothers, 1900), p. 340.

With its bastions and palisade Fort Harmar reflected
a mixture of frontier and European fortification. It also
reflected the unfamiliarity of Colonel Harmar and the
fledgling Army with the wilderness. The Army was made up
of one-year enlistees from the militias of New York, New
Jersey, and Pennsylvania (Weigley, 1967, 82). It is
doubtful that many of these militiamen were experienced
frontiersmen. Nor were there many experienced professional
soldiers with them. Although Harmar was a veteran of the
Revolution, his own inexperience with Indian methods of
warfare cost the Army its first major defeat in its first
major campaign against the Indians in 1790 (Weigley, 1967,
90).

Frontier forts built after Fort Harmar were simpler
in design and smaller in size. At least in the Ohio
Valley, the most common fort was the square fort with
blockhouses on each corner (Robinson, 1977, 134). These
forts were easier to build than structures like Fort
Harmar, and the same area could be enclosed with less
wall. Fort Washington, built in 1789 at the present site
of Cincinnati, has been described as a square fort with
blockhouses, even though its construction was still some-
what sturdier than later forts of the wooded East.
Instead of a simple palisade, its walls were said to have
been formed by two-story log buildings connecting the
corner blockhouses (Hulbert, 1906, 172).

Sketches of later forts in the East reveal increas-

ingly simple designs. They also reveal some of the
military traits of their builders. The separation of
administrative areas, officers' quarters, and soldiers'
quarters reflected the need for the Army to maintain
military discipline and order. Grouped as they were
around the inside of a fort's walls, the buildings left
an open assembly area in the middle of the fort. The
parade field, a central feature even today on Army posts,
became a part of the early frontier fort (see figure 18).

Thus far, the growing simplification of forts and
their movement away from the designs of European fort-
ification seemed to support at least some Turnerian ideas
about the frontier. The complex forms of European fort-
ification, including the bastion, disappeared completely
as the frontier approached the Mississippi River. The
blockhouse, which provided greater protection from arrows
than the open bastion, became a common feature of American
forts. Frequently, it stood alone as an independent
castle. Compared to Fort Harmar, Army posts became
smaller and more independent. They reflected American
needs, and they drew away from European principles.

Perhaps one of the best summations of the frontier
fort in the wooded East was provided by Benjamin Franklin
in 1756. His description of Fort Allen, Pennsylvania
could have been applied to the architecture and function
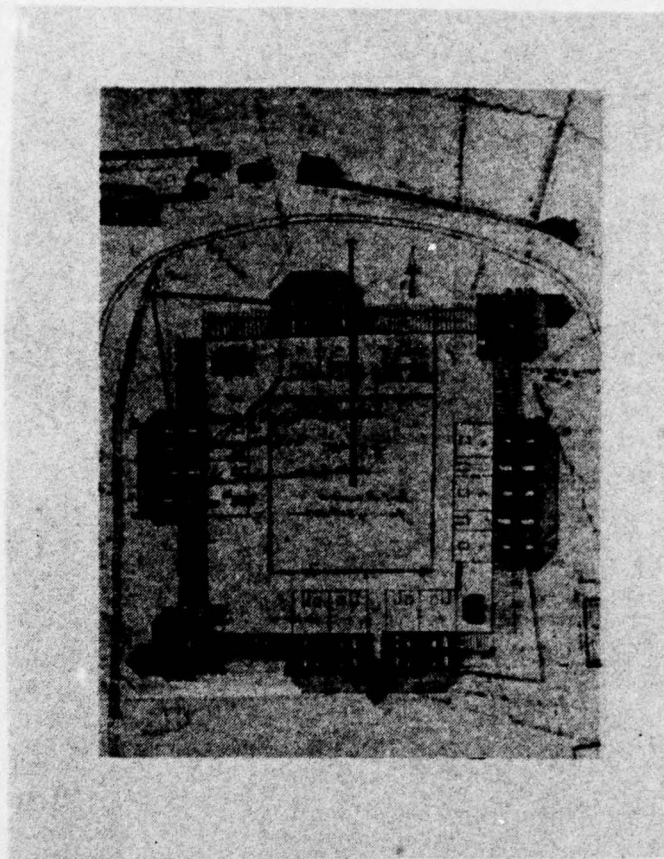of many forts built prior to about 1830:

Figure 18. Sketch of Fort Dearborn, 1808.
This early sketch of Fort
Dearborn, located at the site
of Chicago, illustrates some of
the classic features of frontier
Army posts in the wooded East.
Note the blockhouses at the upper
right and lower left corners of
the stockade. The parade field
with the flagpole in the center
is also obvious. The large
building at the bottom protected
the gate and was probably used for
administrative purposes. The
other buildings within the stockade
were probably quarters.

SOURCE: National Archives,
Drawer 130, Sheet 3.

> Each pine made three palisades of eighteen
> feet long, pointed at one end. When they were
> set up, our carpenters built a platform of boards
> all round [sic] within, about six feet high. We
> had one swivel gun, . . . and fired it . . . to
> let the Indians know . . . that we had such pieces;
> and thus our fort (if that name may be given to
> so miserable a stockade) was finished in a week,
> . . . .
> This kind of fort, however contemptible, is
> sufficient to defense against Indians who have
> no cannon (quoted in Indian Forts Commission,
> vol. 1, 1896, 194).

Posts of the West

West of the ninety-eighth meridian (the approximate dividing line between the humid East and and the arid West) the lands were vast, and the climates were varied. The variation in Army posts was as frequent as the variation in climates, physical features, people, and the purposes of the posts. Most forts in the wooded Pacific Northwest were similar to the palisades and blockhouses of the East (Hart, 1967, 81-90). The humid climate and the abundance of lumber were only two reasons for the similarities between the forts of the two regions. The Indians of the Pacific Northwest were not the fierce, equestrian warriors of the Great Plains. Additionally, one of the traditional enemies of the United States that had been present in the Old Northwest Territory, Great Britain, was also present in the early years of settlement in Oregon Territory.

In some areas of California and the Southwest, the Army occupied old Spanish presidios (Hart, 1967, 61-80).

Some of the more permanent posts in the Great Plains, such as those along the Oregon Trail, took on appearances that might have been reminiscent of Roman frontier forts (see figure 19). There were even a few forts of the arid West that looked as much like European fortresses as anything on the Atlantic coast. Fort Marcy, New Mexico was one such fort. Fort Brown, Texas also had its Vaubanish fort, but its location on the Mexican border and the Gulf coast made Fort Brown a closer relative of the traditional coastal forts than of the frontier forts (U. S. War Department, 1870, 206).

The vast majority of the Army's frontier posts in the Wild West were located in the arid and semi-arid regions of the Great Plains and the Southwest (see maps 7 through 11, 1850-1890). This fact and many others led to marked differences in their appearances from any previous posts. Not only were these posts difficult and expensive to supply, but the entire operation of the Army was considerably more expensive in the arid West than in other regions of the country (see table 4). One of the major reasons for the increased costs was the necessity to buy and maintain large numbers of horses that had previously been considered luxury items. Many horses were used to pull supply wagons, but many were also used as mounts for the legendary horse cavalry of the Army. "The only description of troops that can effectually put a stop to these [Indian] forays is cavalry.
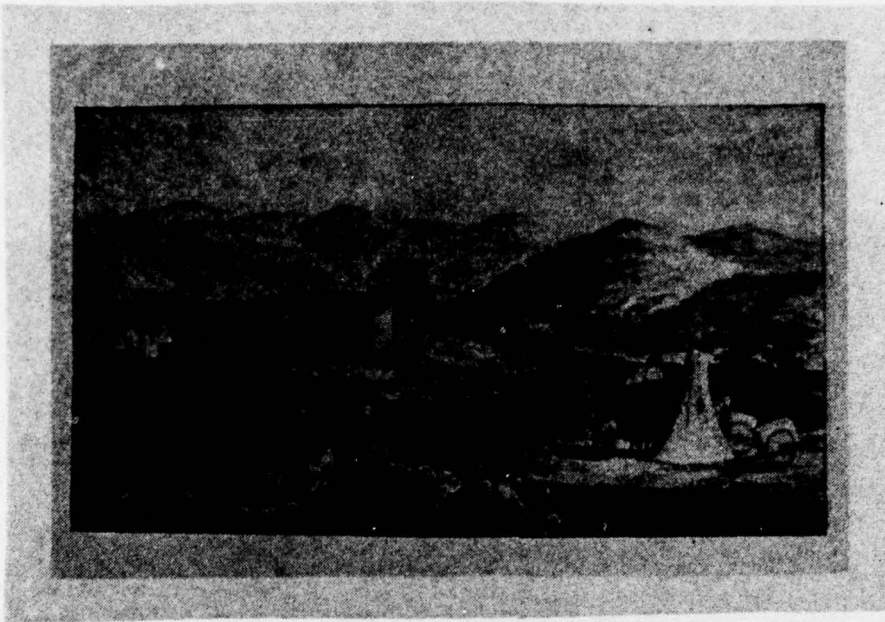
Figure 19.   Sketch of Fort Laramie in about 1850.
Fort Laramie occupied a strategic
position on the Oregon Trail (see map
7, 1850, #131). Originally built by
the American Fur Company, it was oc-
cupied by the Army in 1849. Its im-
posing walls and orderly appearance
certainly must have been impressive
to frontiersmen and Indians alike.

SOURCE: John Charles Fremont,
Memories of My Life (Chicago and New
York: Belford, Clarke, and Company,
1887), p. 106.

TABLE 4

EXPENSES OF THE MILITARY DEPARTMENTS OF
NEW MEXICO, TEXAS, OREGON, AND
CALIFORNIA COMPARED TO
EASTERN DEPARTMENTS,
1850

Category of Expenses	Costs of Western Departments	Costs of Eastern Departments
Pay	$1,595,035	1,320,709
Commissary (food) . .	916,697	318,087
Quartermaster (fuel, clothing, horses, etc.)	4,225,752	530,247
Medical	46,776	14,772
Ordnance (arms and ammunition)	660,000	329,815
Total	7,444,261	2,413,580

SOURCE: U. S. War Department, Office of the
Secretary of War, Annual Report of the Secretary of
War (Washington, D. C.: U. S. Government Printing
Office, 1850), p. 109.

NOTE: Part of the high costs of the western
departments might simply be attributed to the fact
that there were more troops in these departments.
The figures in this table, however, were taken just
after the close of the Mexican War. As evidenced by
the nearly equal sums in the respective Pay Departments,
the western troops did not heavily outnumber the
eastern troops at this date.

They stand in little awe of troops on foot" (<u>Annual
Report of the Secretary of War</u>, 1850, 4).

A look at figure 2 (page 16) reveals that the period
between the Civil War and the dawn of the twentieth
century was the longest period in the Army's history of
consistently low budgeting from the federal government.
Considering the fact that this was also one of the most
intense periods of activity on the frontier, and the
fact that the arid West was an expensive region in which
to operate, one gets a fair idea that the Army of the
Wild West must have been a very poor one.

The evidence of poverty in the Army of the Wild
West was strong. Spending had to be cut as much as
possible in areas not directly related to actual mission
requirements. In 1851 a program was initiated that
required soldiers to raise vegetables on each post. The
soldiers were allowed to share in any profits, so that
the Army did not have to pay exorbitant prices to ship
food from civilian sources. During his inspection tour
in 1853-54, Colonel Mansfield remarked that the program
was detrimental to the Army, because soldiers took more
interest in their vegetable gardens than in their military
duties (Frazer, 1963, 63).

The hiring of civilians was almost exclusively
limited to mule drivers and wagon handlers, although
skilled civilians were used to help build coastal fort-
ification at San Francisco (Frazer, 1963, 133). After

1860 the War Department specifically prohibited the use of civilian artisans without special approval from Washington, D. C. (U. S. War Department, 1860, 5). As a result, soldiers found themselves spending much of their time building their own posts. They frequently complained that they were used more as carpenters than as soldiers (Hart, 1967, 12).

The construction of frontier Army posts was certainly not very high on the War Department's list of priorities. Table 5 reveals that the funds allotted for such work were a lower percentage of the total Army budget than before the Civil War. Considering the large number of posts that were built during this era as compared with previous eras, the amount of money allowed for each post must have been very small indeed.

The mobility of the Plains Indians also affected the appearance of Army posts in the Wild West. The Indians seldom stayed in one place very long, and the soldiers had to keep moving in order to fight them. As a result, the posts grew increasingly temporary. One commander remarked in 1850 that "throughout the year, the troops in Texas have been more like an army in the field, in active war, than in garrison; . . . (Annual Report of Secretary of War, 1850, 124). In some areas of the arid West this situation changed very little until the last Indian tribes were defeated in 1890.

Certain other Indian habits provoked changes

TABLE 5

EXPENDITURES FOR CONSTRUCTION AND REPAIR OF BARRACKS
AND OTHER BUILDINGS ON ARMY POSTS, 1840-1970

TABLE 5

EXPENDITURES FOR CONSTRUCTION AND REPAIR OF BARRACKS
AND OTHER BUILDINGS ON ARMY POSTS, 1840-1970

Fiscal Year	Expenditures	Percent of Total Army Spending	Fiscal Year	Expenditures	Percent of Total Army Spending
1840	$226,409	3.2	1917	$11,500,000	3.0
1845	Not Available	–	1918	756,000,000	1.6
1850	Not Available	–	1920	146,741,963	9.0
1855	377,180	2.6	1925	8,160,671	2.2
1860	355,260	2.0	1928	53,977,119	13.5
1865	7,340,672	.7	1930	20,000,000	4.3
1870	488,550	.8	1935	68,000,000	13.9*
1875	1,006,529	2.4	1940	70,000,000	4.3
1880	534,500	1.4	1941–1945	800,000,000**	9.3**
1885	480,198	1.1	1947	204,000,000	2.2
1890	419,893	.9	1951	528,709,242	6.1
1895	326,530	.6	1955	651,519,413	6.9
1900	670,000	.5	1960	341,442,259	3.3
1905	11,379,846	9.0	1970	280,000,000	
1910	3,447,578	1.8			
1915	2,067,558	1.0			

SOURCES: U. S. War Department, Annual Reports of the Secretary of War, 1840-1947. U. S. Department of Defense, Department of the Army, Financial Statements (Washington, D. C.: U. S. Government Printing Office, published monthly since 1947).

*Money appropriated in this year was used in the Civilian Conservation Corps over a period of several years.

**Figures represent an average for each year.

in the designs of Western forts. The Army soon dis-
covered that the Plains Indians seldom attacked soldiers,
unless the Indians had an overwhelming majority. They
were even more reluctant to attack Army posts or large
settlements, preferring instead to conduct small raids
to steal the cattle and horses of outlying settlements
(Webb, 1931, 61-62). Not only did these habits allow
the Army to move away from the despised towns, but they
also greatly reduced the need to fortify Army posts
against possible attack.

The poverty of the Army, the use of soldiers as
laborers, the increasingly temporary nature of the posts,
and the lack of necessity for fortification in most
cases were important elements that contributed to the
appearance of Army posts in the arid West. Descriptions
of the period contained such phrases as "nothing but
patchwork" (U. S. War Department, 1870, 231) or
"miserable old odobe buildings" (Frazer, 1963, 143).
One of the better general descriptions of a post in the
arid West was provided by the local surgeon at Fort
Concho, Texas in 1870. His summary could have applied
to numerous other posts of the period.

> Brief as has been its existence, . . . the
> identity of the post has nearly been lost, espe-
> cially to the Post Office Department, on account
> of the multiplicity of names. It is still misnamed,
> and the disappointment of the young officer who may
> be ordered to it for a station, who has built his
> ideas of defensive works upon such examples as may
> be found upon eastern coasts or northern frontier,

will not be lessened after his experience has
taught him that the isolated post amongst merci-
less foes should be what is named, a fort (U. S.
War Department, 1870, 199).

Even though the 1860 regulations of the War
Department were apparently never issued, many of the
ideas were incorporated in the construction of Army
posts in the arid West. In referring to the quality
of buildings, the regulations specified that "in every
case the finish shall be plain, and the strictest economy
practised" (U. S. War Department, 1860, 5). The use of
soldiers masquerading as artisans guaranteed that these
guidelines would be followed, and most of the buildings
were of very poor quality. The majority of them were
simple one-story structures (see figure 20). They were
usually built with whatever material that could be found
in the vicinity. Some were constructed of wood. Others
used adobe or unsculptured stone. Some were nothing more
than tent camps (Frazer, 1963, 143), while in at least
two cases the soldiers occupied dugouts in the earth,
until wooden shacks could be built (U. S. War Department,
1870, 261 and 301). The best comments that the local
military surgeon at Fort Quitman, Texas could make were:

The dormitories of the barracks, having neither
doors or windows, have abundant ventilation; they
are warmed by open fires (U. S. War Department,
1870, 231).

The buildings of just about every post beyond the
frontier would have fit into the above descriptions.
Some of the posts that remained in existence for longer

Figure 20.   Barracks at Fort Douglas, Utah in 1866.
Even though Fort Douglas remained active
for more than one hundred years (1862-
1965), the barracks shown in this sketch
were built when the post was still new to
the frontier. Since the post was built
in the area settled by the Mormons, these
barracks were probably of better quality
than some built deeper in the wilderness.
Fort Douglas was also not a classic Indian-
fighting post. Its original purpose was
to make the presence of the government
known to secession-minded Mormons.

SOURCE: National Archives

than ten years, particularly those in the settled
regions, made notable improvements in their buildings.
In terms of quality and durability, the buildings at
Fort Riley, Kansas in 1867 were certainly a far cry from
those at Fort Quitman (see figure 21). By 1860, however,
the frontier was passing Fort Riley, and the post was
approaching the same status as Jefferson Barracks (see
map 8, 1860, #154).

Paradoxically, the ramshackle quality of the
buildings on frontier Army posts did not match the
general layouts of the garrisons. The organization of
these posts was neat and orderly. Most of them were
simple square arrangements, just like palisade forts
without the palisades. The need for stables spread some
structures outward from the centers of the posts, but
most of the barracks, quarters, and administrative
buildings were grouped around a parade field or assembly
area. Frequently, a flagpole marked the center of the
parade field. Some commanders deviated from the use of
rectangular designs for their posts, but the arrangements
of the buildings were still simple, neat, and orderly
(see figures 22 and 23).

Discipline and the Designs of Frontier Army Posts

It was remarked earlier that military organization
and discipline had influences on the arrangements of
buildings at the stockade forts of the East. This was

Figure 21.   Plan of Barracks at Fort Riley, Kansas in
              1867. These two-story stone barracks were
              a great improvement over the barracks at
              most Army posts beyond the frontier. Not
              only had the frontier passed Fort Riley by
              1867, but the post had a more lasting
              mission than most frontier posts. Its
              purpose was to help guard some of the
              Indians already on reservations.

                   SOURCE: National Archives, Record
              Group 77, Sheet 31.

Figure 22.   Plan of Fort Sill, Indian Territory in
              1874. This figure illustrates in great
              detail the simple, neat, and orderly
              arrangement of one frontier post. Note
              the many features of military discipline
              and organization shown here. Also note
              the post garden in the upper right corner.
              Fortification had obviously become of
              secondary importance here, as evidenced
              by the small defensive position (redoubt)
              on the edge of the post.

                   SOURCE: U. S. War Department, Office
              of the Surgeon General, Circular No. 8:
              A Report on Barracks and Hospitals with
              Descriptions of Military Posts (Washington,
              D. C.: U. S. Government Printing Office,
              1875), p. 237.
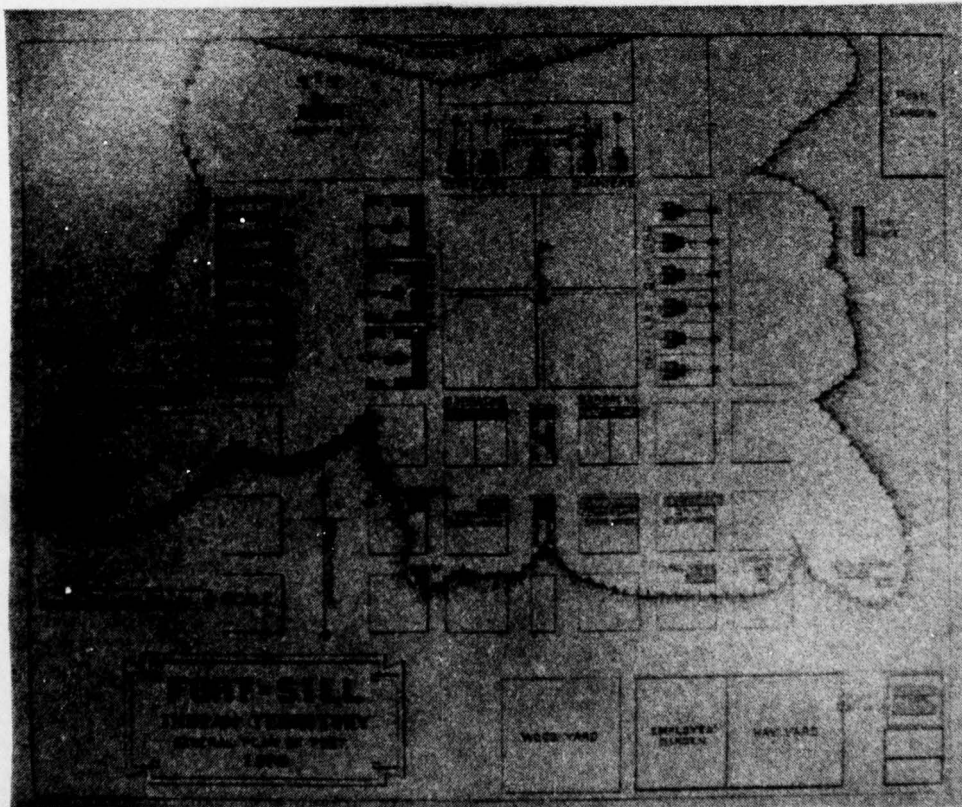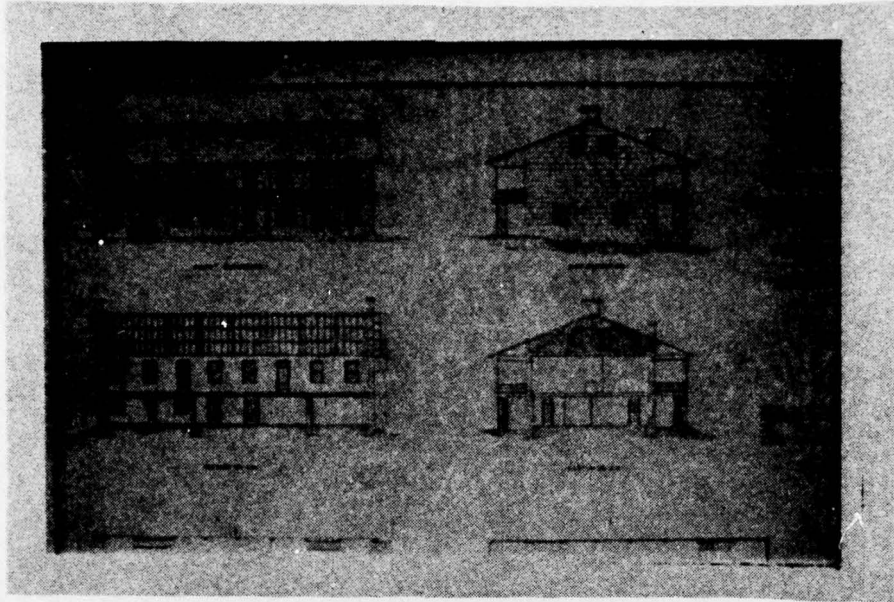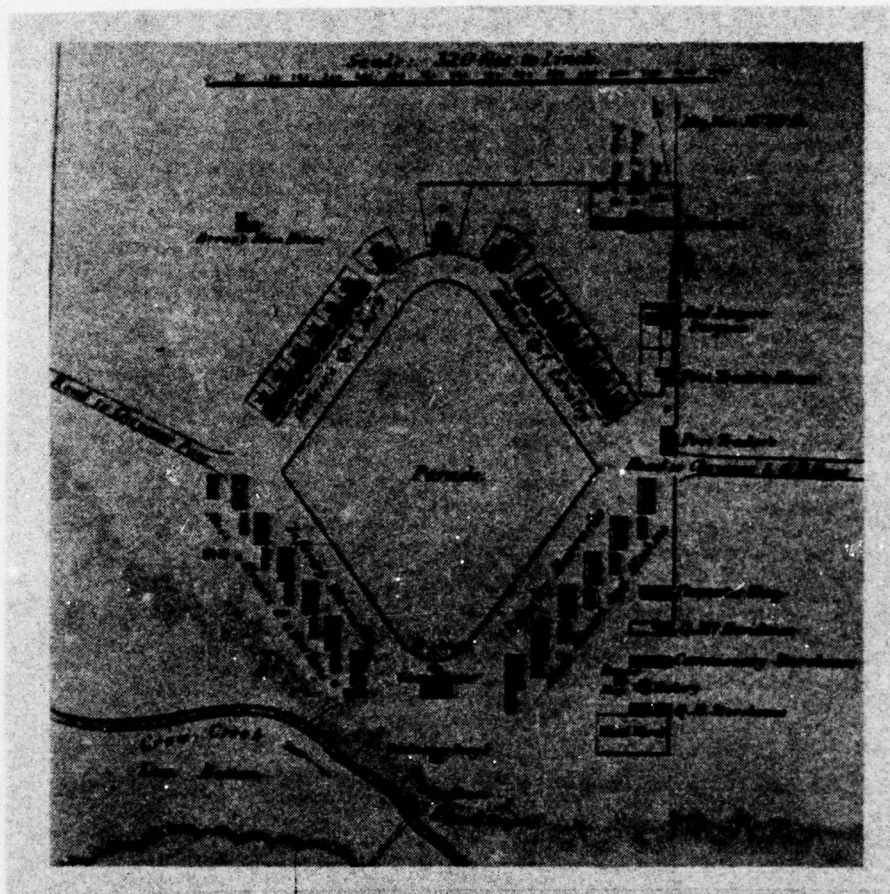
Figure 23. Plan of Fort D. A. Russell,
Wyoming in 1870. A little
ingenuity was evident in this
diamond-shaped frontier post,
but the designer did not sacrifice
any of the basic requirements for
military organization, simplicity,
or neatness.

SOURCE: U. S. War
Department, Circular No. 4,
p. 340.

no less true in the arid West. In the midst of the confusion and poverty of the West, there was order in the Army post. The War Department's concept of what a garrison should look like was contained in the 1860 regulations (see figure 24). Despite the lack of control from the War Department, a large number of the tiny posts on the frontier looked very similar to one another, and their arrangements approached the design used by the War Department. The layout of Fort Sill was typical of many posts in the arid West. Even the innovative layout of Fort D. A. Russel followed the basic principles of order, simplicity, and neatness.

The necessity for order and structure was not just a military trait, but it was more important to the Army than to most other cultural groups. It was through organization that the Army helped to instill discipline in its ranks. Professional officers were trained in the importance of organization and discipline, and they carried their ideas to the frontier. Even though they often operated with a large degree of independence on the frontier, Army officers generally recognized that discipline was the key to success in any military organization. The simple, square arrangement, with its separate functional areas and quarters, served to strengthen the discipline of each Army unit. It gave the commander better control over his unit, and it was a constant reminder to soldiers that the Army was a

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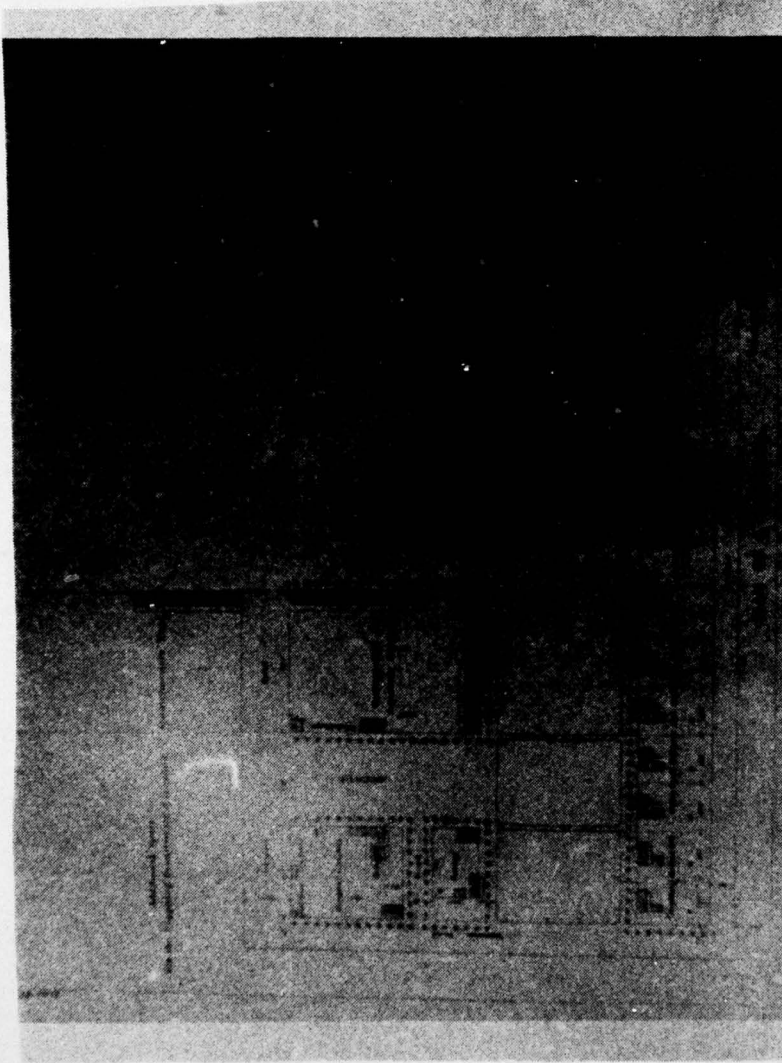
Figure 24. The War Department's Plan for an Army Post, 1860. Although this plan was never issued to units in the field, many of its features could be found on active posts. The only major differences in this plan and the realities of the period appear to be the long and narrow parade field and the addition of wide avenues in this plan.

SOURCE: U. S. War Department, Regulations Concerning Barracks and Quarters, plate xvi.

highly structured society. Once the stockade walls began to disappear, there was really no need to alter the general layout of the small frontier post. Commanders continued to copy the arrangement, because it worked for them. In this regard, the ideas that had worked in the humid East changed little in the arid West. They continued to have an impact on the Army post after the days of the frontier were gone.

Forts of the Permanent Indian Frontier

It has been a central theme of this chapter that frontier forts in America were generally simple, expedient structures. As the frontier spread west, these forts followed some Turnerian principles by reverting toward primitive states and by diverging from ancestral forms. There are exceptions to every rule, however, and the forts of the permanent Indian frontier were major exceptions to this rule.

The trend toward simpler forts halted for a time when the Army reached the Great Plains and the permanent Indian frontier, and it began to revert once again toward European methods of fortification. Although a complete reversal was not made, it was apparent to some people that the days of the simple wooden stockade of the East were over. As the perceived permanence of the Great Plains barrier became increasingly obvious, plans for the defense of the western frontier became more complex.

Designs for the forts were reminiscent of early European forts in America. Once again, the square fort with bastions on each corner was the most popular suggestion in the War Department (see figures 25 and 26).

Fort Smith, Arkansas was one of the earliest Army posts on the edge of the permanent Indian frontier. Like its immediate predecessors in the wooded East, the fort was originally designed as a square; however, the simple palisade and blockhouses were gone. Instead, the design called for thickly fortified walls, and the outlines of incipient bastions were apparent on alternate corners (see figure 27). The fort's final design went even further toward retracing earlier military architecture. In the Surgeon General's report of 1870 Fort Smith was described as a pentagonal fort with walls of brick and stone. The star fort had found its way to the edge of the Great Plains (U. S. War Department, 1870, 271).

Fort Snelling, Minnesota was another fort on the edge of the permanent Indian frontier, but it was unique in both purpose and design. Located at the juncture of the Minnesota and Mississippi Rivers, the original design was similar to that of the original Fort Smith design (National Archives, Drawer 37, Sheet 34). The fort that evolved, however, was different from any standard design seen in America. It was a stone fort, but it was not built according to Vaubanian principles. Its appearance

Figure 25.   Sketch of a Fort after the System of General
             Carnot - Planned for the Defense of the
             Western Frontier. The title and the picture
             say just about everything there is to say
             about this figure. French fortification had
             found its way into plans for the American
             frontier.

                 SOURCE: National Archives, Drawer
             155, Sheet 1.

Figure 26.   Plan of the Works Calculated for the Posts
             of the Indian Frontier by General Alexander
             Macomb. The Army leadership in Washington,
             D. C. was apparently determined that the
             permanent Indian frontier was indeed perma-
             nent, and that it should be defended as
             such. General Macomb served as Commanding
             General of the Army from 1828 to 1841.

                 SOURCE: National Archives, Drawer
             156, Sheet 47A.
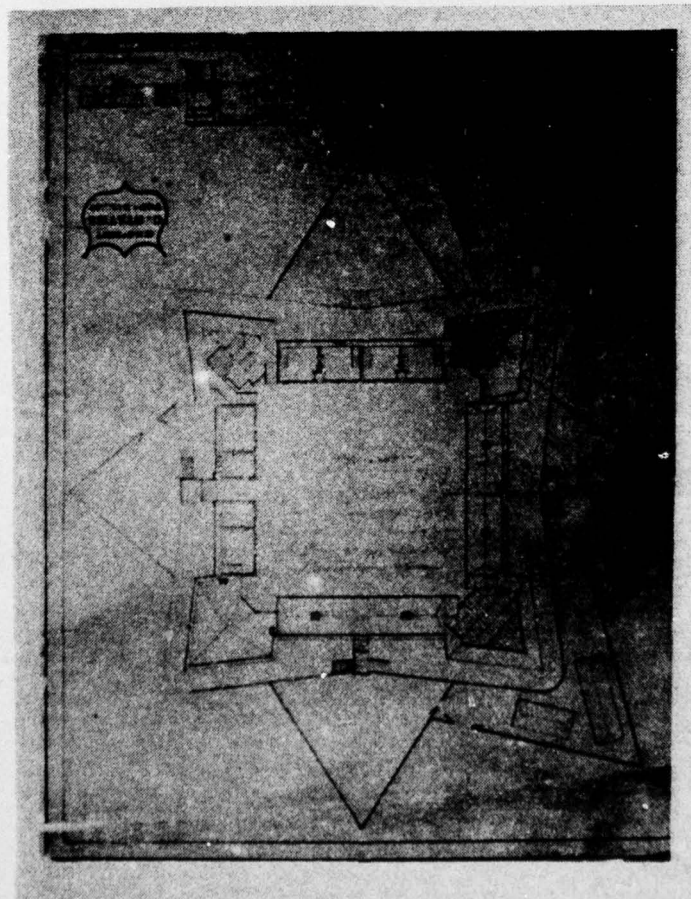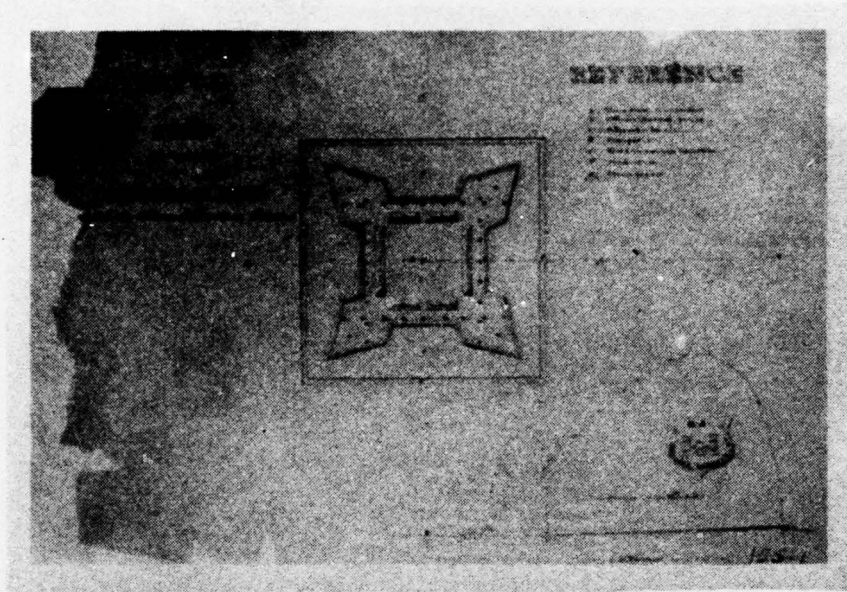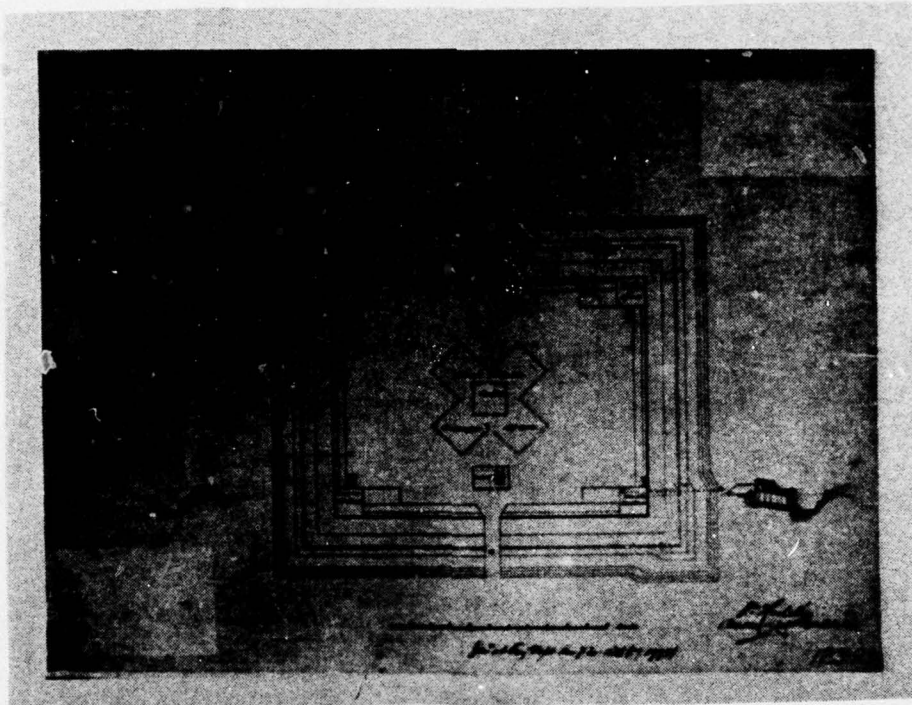
Figure 27.   Plan of Fort Smith, Arkansas. The
heavy fortifications in this plan
illustrate once again the serious-
ness with which Army leaders contem-
plated the permanent Indian frontier.
Fort Smith was activated in 1817 and
was used for many years to guard the
Indian reservations in present
Oklahoma. Note the blockhouse in the
center of the fort. It obviously
served a purpose similar to that of
the citadels in European fortresses.

SOURCE: National Archives,
Drawer 123, Sheet 23-10.
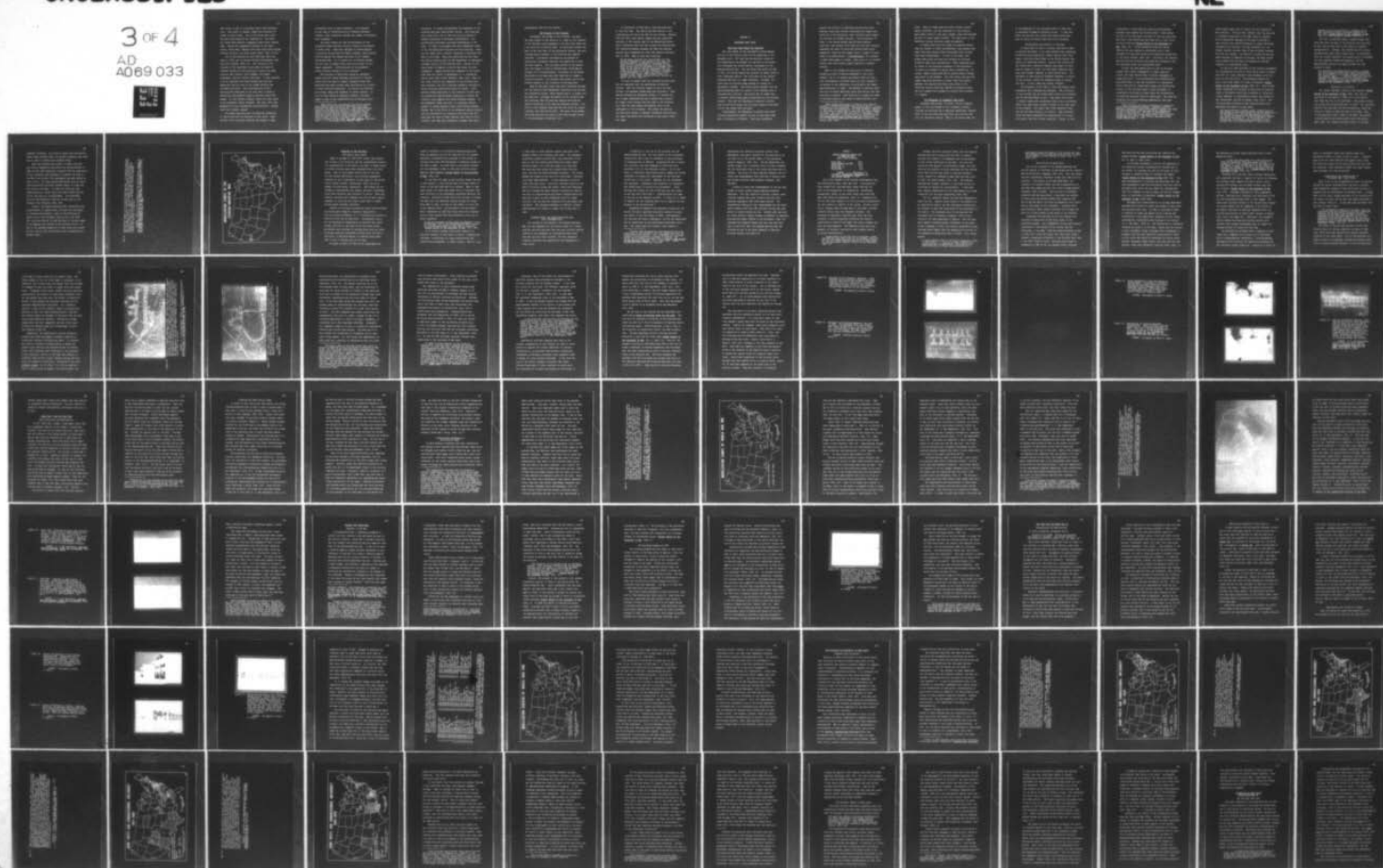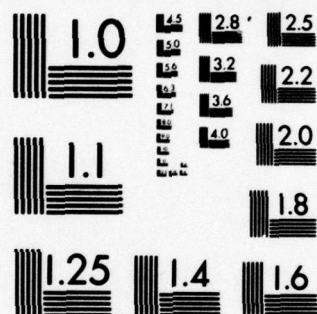
MICROCOPY RESOLUTION TEST CHART

NATIONAL BUREAU OF STANDARDS-1963-A

was closer to that of a medieval castle than anything else. Four walls of unequal length were anchored by towers on each corner. Two of the towers were round and were used primarily for observation. The other two towers were massive, hexagonal towers three stories high. Cannon were apparently mounted in the upper levels, while small weapons could have been fired through vertical slits in the lower levels (Hart, 1963, 14-15).

One of the purposes of Fort Snelling, which was begun in 1819, was to prevent British encroachment from the north (Frazer, 1965, 67). Its location at the juncture of two important rivers near the nation's northern border put Fort Snelling in almost the same class as Fort Ontario, Fort Niagara, Fort Wayne (Michigan), and Fort Porter (New York). It was destined to be an important and long-lasting post from the beginning, and its role on the Indian frontier was secondary and brief. The fortifications of Fort Snelling were explained by the fact that it faced a traditional and powerful enemy in British controlled Canada. No such threat, however, faced the other posts of the permanent Indian frontier. Why then, were they designed with such substantial fortifications? Perhaps there were several reasons.

One reason may have been the expected permanence of these posts and the frontier at this point. Most frontier forts had never existed long enough to make

substantial work on them worthwhile. As evidenced
by the lack of fortifications at Jefferson Barracks,
however, other conditions besides the length of existence
were necessary.

The major reason for the fortifications of the
permanent Indian frontier could be found in the purpose
of these forts. They were designed to defend against
a perceived threat from the Plains Indians, whose mounted
warriors gained the respect and fear of the largely
dismounted Army. As it turned out, the Plains Indians
did not like to attack forts, and the frontier did not
remain permanent. Fortifications on the permanent
Indian frontier turned out to be useless.[1]

The reversal of Army posts along the permanent
Indian frontier toward European principles of fortifi-
cation does not seem to support Turnerian ideas that
Americans had drawn further away from Europe as a result
of their frontier experience. As long as the frontier
was moving, Army posts appeared to become simpler. As
soon as some stability appeared, however, the plans
began to take on the characteristics of European forti-

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[1]When they first encountered the Plains Indians,
Army officers were obviously impressed with their
abilities as warriors and riders. They made numerous
reports concerning the habits of these natives, and
nearly all of them were written in admiring tones.
Finally, Colonel William Whistler reported in 1837
that the Plains Indians "dread fighting in timber or
forest lands" (quoted in Foreman, 1933, 151). See
Colonel Richard Irving Dodge, Our Wild Indians (Hartford,
Conn: A. D. Worthington and Company, 1882).

fications. In these circumstances the paradoxes of the
frontier Army were particulary visible. Fort Snelling
was a stone fort, but it was not built according to
popular principles of European fortification. Its
architecture reflected a growing independence of the
Army. At least its designer had some independent ideas
to fit the particular situation of Fort Snelling. Plans
for the other forts, however, reflected a continued reli-
ance on old ideas. They also reflected the fact that
the stable frontier gave the War Department in Washington
stronger control of the frontier Army. Neither of the
plans shown in figures 25 and 26 were drawn by local
commanders. General Macomb was commander of the entire
Army from his office in Washington, D. C. during the
period from 1828 to 1841 (Weigley, 1967, 559). Many of
the other officers who commanded on the frontier were
West Pointers, who still received extensive training in
French military architecture while in school. Such
methods seemed applicable to the frontier at that time.
The nation had used European techniques to defend the
Atlantic coast against well known European enemies. On
the permanent Indian frontier it considered similar
methods to defend against little known Plains Indians.
Indeed, few of the forts of the permanent Indian frontier
were as elaborate or as strong as Fort Smith and Fort
Snelling, but most of them retained some form of forti-
fication, and they were frequently stronger than their

predecessors from the Ohio Valley.

The Closing of the Frontier

Throughout the spread of the frontier, the Army had been caught in the thick of it. Many of the elements of the frontier posts depended on the fact that there was a frontier and a frontier Army. As railroads crossed the West in the last half of the nineteenth century, the poor transportation inherent to the frontier was steadily improved. Settlements increased as new methods of fencing and irrigation improved the capability to farm the arid regions. The last major battle of the Indian wars was fought in 1890 at Wounded Knee, South Dakota. Perhaps not so coincidentally, the Bureau of the Census announced in the same year that there was no longer a distinct frontier. The frontier was closed, and so was another chapter in the evolution of the Army post.

Many of the small posts that were scattered throughout the frontier had disappeared long before the frontier was officially closed. Many others hung on to merge into the next era. Although the period of the frontier Army was exciting, what followed was equally exciting and equally revealing of the Army and American society. The story of the frontier Army post was the story of a small, isolated, and very mobile Army. The story of the permanent Army post was the story of the Army brought closer to the mainstream of American life.

An indication of what was to come had been seen
in the Civil War. The nation had been forced to use
conscription for the first time in its history. Between
1861 and 1865, mass armies roamed the more populated
sections of the country east of the Mississippi River.
Their influences were felt far outside the battlefields.
The interrelationships between the Army and American
society were recognized by a New York Herald correspon-
dent in 1866. What he said was revealing.

> The European soldiers are conscripted for life,
> become confirmed in the habits of the camp, and
> are subjected to a system of discipline which
> tends to the ultimate purpose of rendering them
> mere pliant tools in the hands of a leader; while
> those of the United States, separated from the
> outer world only by the lax discipline necessary
> to the government of a camp, are open to every
> influence that books, that letters, and to a
> certain extent, that society can lend (quoted in
> Adler, vol. 10, 1968, 2).

It could be argued that the isolated frontier Army
did not represent well the mainstream of American
society. When the frontier caught up with the Army,
however, the argument became much more difficult. When
America entered the twentieth century, it entered the
era of mass communications and international politics.
No longer could society hide the Army on the frontier,
nor could the Army escape the watchful eyes of the
government or the citizenry. The people who made up
the Army were subject to greater influences from society,
and these influences were reflected in the Army's forts
and camps.

CHAPTER IV

PERMANENT ARMY POSTS

Have They Been Taken For Granted?

The last decade of the nineteenth century marked
the end of the frontier post and the beginning of the
permanent post. Not only was the frontier closed at
the beginning of the decade, but the end of the decade
also witnessed the United States' involvement in the
Spanish-American War. For the first time since the War
of 1812, the United States was involved in armed conflict
with a European nation. The tiny posts of the Indian-
fighting Army were no longer necessary. Instead, the
nation had to mobilize large numbers of troops for
deployment overseas. The United States emerged from the
Spanish-American War as a nation to be reckoned with in
international politics. The nation was no longer what
in present terminology might be described as a developing
country. This was the beginning of America's crucial
test on the world scene, and the Army played an important
role in the events that followed.

Surprisingly, the emergence of America into world
politics practically marked the end of Army posts that
were of interest to scholars. Even most historians

ignored the subject of twentieth century Army posts.
Numerous works were written concerning the origins and
evolution of fortification, while frontier posts caught
the interest of several scholars. From the myriad of
books in the United States Army Military History
Institute, this author could find only one that directly
addressed the topic of twentieth century Army posts.[1]
Apparently, when the term _fort_ could no longer be recog-
nized as an abbreviation of _fortification_, the interest
in Army posts began to recede. Army posts of the present
century have been almost totally ignored in academic
circles.

Many of the reasons for this lack of interest
probably go back to factors addressed in the first
chapter, but it is unclear why modern posts are even
less interesting to scholars than old ones. Perhaps it
is because of the difficulty of relating to the large,
sprawling posts of today. The absence of imposing walls
and rows of cannon make Army posts less obvious and less
exciting to observe. Such posts are no longer the seeds
of frontier towns or the oases of weary frontier trav-

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[1]That single source was a volume of the official
history of the United States Army in World War II. It is
available in most libraries. Although primarily dedicated
to World War II construction, the book devoted a chapter
to the review of World War I posts and the years between
the wars. See Lenore Fine and Jesse A. Remington, "The
Corps of Engineers: Construction in the United States,"
The United States Army in World War Two (Washington,
D. C.: Office of the Chief of Military History, United
States Army, 1972).

elers. They no longer mark the trails across hostile
Indian territory, nor the entrances to vital harbors.
They simply blend in with their largely urban surroundings
and are no longer highly visible. The Army posts of the
twentieth century have been taken for granted.

If modern Army posts are taken for granted because
they are similar to their surroundings, then perhaps this
means that they reflect their environment more closely
than their predecessors. If this is the case, then
modern Army posts are even more valuable as cultural
artifacts than their predecessors. Their appearance may
be closer to the accepted standards of the population.
It would be a mistake to ignore such a possibility. Of
course, today's Army posts may be ignored simply because
they exist in the present. For some reason the past has
always been more exciting to people than the present.
Whatever the reasons have been, Army posts of the
twentieth century have been ignored in scholarly work,
and this chapter will attempt to rectify that situation
to a degree.

The Emergence of Permanent Army Posts

Permanent Army posts, of course, did not suddenly
appear in the last decade of the nineteenth century.
Although the frontier was a temporary experience, several
posts of the era exhibited qualities that spilled over
into the twentieth century. Many of the forces that led

to the emergence of the sprawling posts of today were
in existence throughout American history. It was only
after the frontier was closed that these forces were
able to bring the modern Army posts into existence.

Consolidation and Control of the Army

If there had not been a frontier (and hence a need
to scatter the Army), it is very probable that sprawling,
fortificationless garrisons (albeit smaller than those
today) would have been normal in the United States long
before the twentieth century. Without the frontier and
the Indian wars, America's Regular Army might not have
been as large as it was, but that which remained would
have been brought together in consolidated posts. The
existence of such posts as Jefferson Barracks, in spite
of the frontier, should be evidence enough to support
the idea. If not, there was further evidence.

The dispersal of the Army in tiny one-company posts
throughout the wilderness was abnormal. The conditions
of the frontier and the Indian wars forced the government
and the War Department to act. They might have chosen
to conduct large scale operations from a few consolidated
posts, but they chose instead to fight on the same scale
as the Indians. The result was a very expensive Army,
and one that was difficult to control. High operating
costs and small appropriations contributed to low pay,
low morale, and poor living conditions. These, in turn,

contributed to high desertion rates and disciplinary problems that plagued the frontier Army.[1] Even before the era of the Wild West, the Army of 1830 was reporting more than 1,000 desertions each year from a total force of only 6,000 men (Annual Report of the Secretary of War, 1830, 29). Colonel Mansfield reported during 1853-54 that one company in California with a total strength of forty-nine soldiers had twenty-two desertions in one month (Frazer, 1963, 167). Obviously, the frontier Army had serious problems with money and discipline, and the scattered posts only exacerbated them.

In much the same manner and for some of the same reasons that people congregated in large towns and cities, the Army learned that it should congregate in large Army posts. Just as merchants and industrialists discovered that it was more economical to concentrate their activities in large market areas and distribution points, so too the Army found it more economical to concentrate the troops in areas where the distribution of goods and services could be centralized. The Army was certainly not a profit-making organization, and some

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[1]Other factors obviously contributed to desertion rates and disciplinary problems. Enlisted soldiers generally came from lower socio-economic groups, and some of them undoubtedly used the Army as an inexpensive ticket to the frontier. The lure of adventures and possible riches was strong, particularly near the gold fields and boom towns. See Weigley, History of the United States Army, p. 168.

people might argue that to compare it with industries
was ludicrous. The fact was, however, that the Army had
to function along some of the same lines as industry.
Profit making was replaced by the need to perform a
vast mission with limited resources in people and money.
Throughout the frontier, the Army operated on a low
budget, despite the fact that it was at almost constant
war with the Indians. In addition to using low pay and
cheap barracks as measures of economy, the Army contin-
ually played with the idea of bringing the soldiers
together in concentrated posts.

As early as 1840 Secretary of War Poinsett recommend-
ed concentrating the Army at three major posts in Albany,
New York; St. Louis, Missouri; and somewhere below the
falls of the Ohio River. His professed reasons for
such a move were based on a need to economize (Annual
Report of the Secretary of War, 1840, 19). When Colonel
Sumner separated his soldiers in 1852 from the frontier
towns of New Mexico Territory, he wanted to "bring the
troops together, in considerable bodies, for discipline
and instruction" (quoted in Frazer, 1963, xvii). The
following year Secretary of War Jefferson Davis also
addressed the subject of Army posts:

> The multiplication of small posts, however much it
> may appear to have been called for by the necessities
> of the service, is of more than doubtful policy.
> The system is expensive far beyond any good results
> that are obtained by it. It is injurious to the
> discipline, instruction, and efficiency of the
> troops, and it is believed that it often invites

aggression by the exhibition of weakness which must inevitably attend the great dispersion of any force (Annual Report of the Secretary of War, 1853, 6) (also quoted in Frazer, 1965, xvi).

The tone of Secretary Davis' comments might have indicated that the days of the frontier post were near an end, and the Army was on the verge of a massive reorganization. Instead, the problem was still being discussed more than thirty years later. As resistance from the Indians dwindled, the possibilities of bringing the Army together became more apparent, and the Quartermaster General once again brought the idea forward in 1885:

> The necessity of assembling the troops in larger and more permanent posts near Indian reservations and in proximity to the great strategic points of the Country [sic] . . . becomes daily more and more apparent in consideration of the principles of economy, efficiency, and wise government (Annual Report of the Secretary of War, 1885, 356).

Relocation to the East

The "great strategic points of the Country" (Annual Report of the Secretary of War, 1885, 356) were not specified in the report of 1885, but it was obvious that they were not in the arid West. The primary reason for having the frontier Army was to control the unsettled regions, and when that job was accomplished, there was really no reason to keep the Army in the West. Most of the population still lived in the East, and attacks on North America had traditionally come from Europe. Webb (1931, 48) likened the Great Plains to the vast

expanses of Russia. By virtue of their size and aridity, these lands provided their own natural defenses, and there was no need to station many soldiers there.

When the frontier was closed, it might very well have been a dangerous proposition for the government to keep an idle Army physically isolated from the population. It was certainly less expensive to operate the Army in the East, and control from Washington was made easier by such a move. The labor unrest associated with an industrializing nation provided further reason to bring the Army back to the East. At least one Army post was established as a direct result of labor strife and the use of the Army as a strikebreaker. Fort Sheridan, Illinois was founded in 1887 for troops used in the Chicago riots (Scanlan, 1963, 224).

Finally, the Spanish-American War necessitated the concentration of large bodies of troops for deployment to overseas battlefields. Most of the mobilization camps were in the Southeast (see map 20), and after this time the efforts to keep the Army in the East began to win against the inertia of old frontier posts. In map 13 the eastward migration of Army posts was evident by 1910, and by 1920 the eastern posts outnumbered the western posts.

Map 20. Mobilization Camps of the Spanish-American War. The Spanish-American War was the first major conflict since 1812 between the United States and a European nation. The conclusion of the war saw the United States in control of an empire. International relations became an increasingly important factor as the American frontier expanded beyond the national boundaries.

SOURCE: Office of the President of the United States, Report of the Commission Appointed by the President to Investigate the Conduct of the War Department in the War with Spain (Washington, D. C.: U. S. Government Printing Office, 1899).

MOBILIZATION CAMPS OF THE SPANISH–AMERICAN WAR
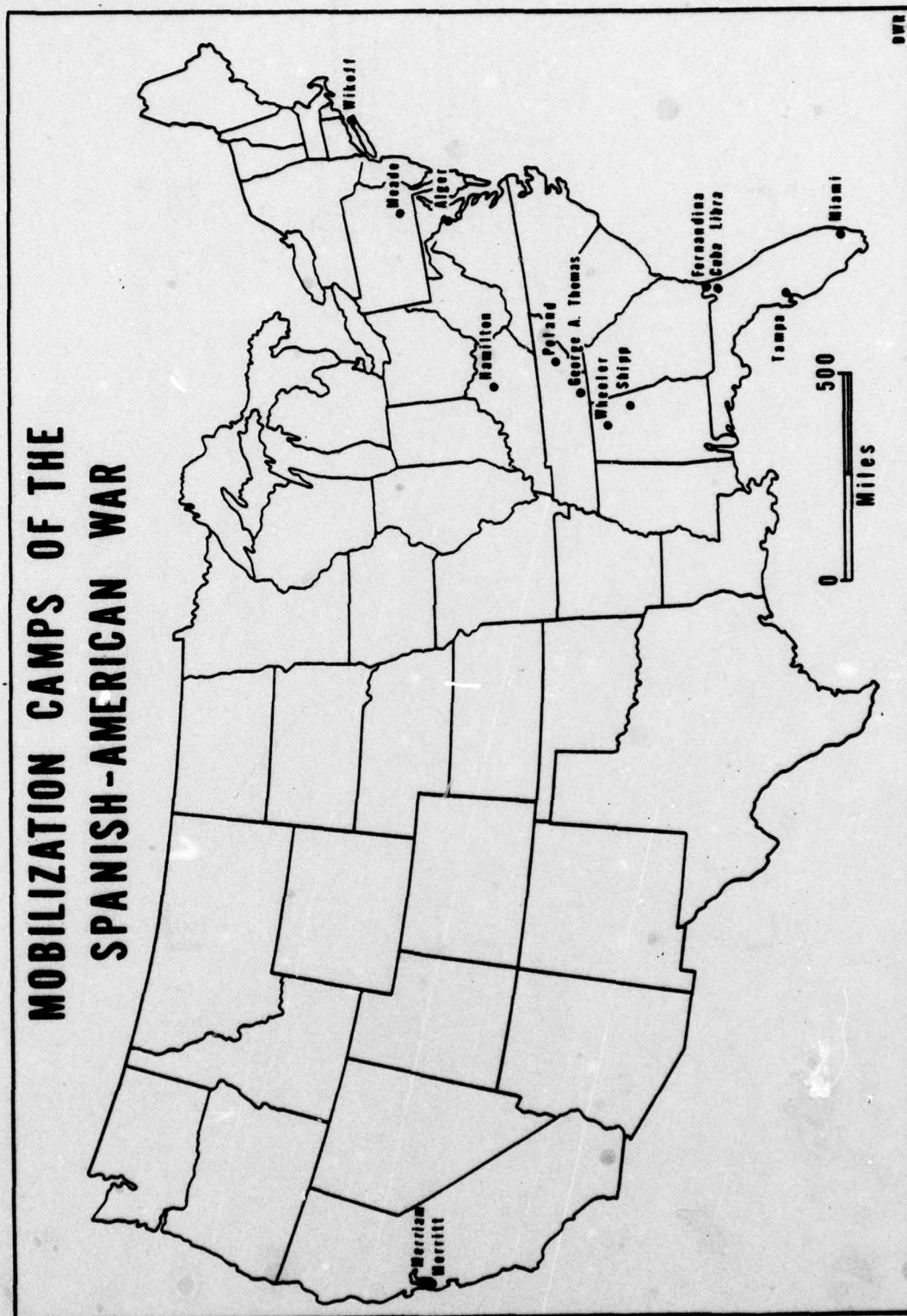
Legacies of the Frontier

Pork Barrel Army Posts?

Maps 12 through 18 (1900-1978) reveal that despite
the closing of the frontier and the overwhelming evidence
for concentration of the Army in the East, a large number
of former frontier Army posts remained active for many
years. Some of them remain active even to this day.
In 1934 Derwent Whittlesey, the political geographer,
referred to the "continuance of army posts in the United
States Indian Country" (Whittlesey, 1934, 93) as an
example of pork barrel legislation. Whittlesey did not
attempt to substantiate his charge, and such a statement
would have certainly been difficult to prove. There was,
however, evidence that Congress was slow to meet logical
requests to close and sell small posts that no longer
served useful military functions.

Control of the purse strings and other Constitutional
provisions gave Congress "exclusive legislation . . .
over all places purchased" (U. S. Constitution, Article 1,
Section 8) for use as Army posts. Governmental policy
for the purchase or acquisition of land was well estab-
lished, and even in the days of the Wild West formal
procedures were followed in setting aside land for posts
(although they were sometimes followed after the fact).
Obviously, it was much easier to establish Army posts
than it was to formally get rid of them.

At least as early as 1855 the War Department had

found it difficult to discontinue unwanted garrisons.
With the growing costs of the Army and the low budgets
available, Secretary Davis proposed to save money by
selling sites that were abandoned or otherwise excess to
the Army's needs. He found that no provisions existed
for the Secretary of War to take such actions without
approval from Congress (Annual Report of the Secretary
of War, 1855, 19).

As the need for small posts dwindled toward the end
of the century, it was obvious that the large number of
posts in the arid West had to be reduced. Many of them
were closed, but there were many still in existence that
some officials of the government considered wasteful and
obsolete. Secretary of War Elihu Root did much to bring
the Army into the twentieth century during his tenure
from 1899 to 1904, but even he was unable to close some
of the smaller posts. His successor, William Howard
Taft, complained in 1905 that there were still eighteen
posts in the country that were occupied by from one to
three companies:

> It may be necessary to have small detachments in the
> Philippines, but in the United States there should
> be no posts garrisoned by less than a battalion
> (Annual Report of the Secretary of War, 1905, 448).

It is unclear whether these posts remained in
existence because of pork barrel politics, congressional
oversight, inefficiency of large bureaucracies and
legislative governments, or sheer inertia. What is clear

is that many of them remained opened long after their primary reasons for existence had ended. The emergency situations created by World War I and World War II did much to end the inertia associated with these former frontier posts, but a few have hung on to this day. The survivors have grown well beyond their frontier size, and they now serve different purposes. Fort Riley, Kansas was chosen as the site for a World War I mobilization camp (Camp Funston). It has remained a division-sized post ever since. Fort Sill currently serves as the Army's artillery center and school, while Fort Huachuca and Fort Leavenworth serve similar functions as schools. The ease of communications and modern transportation has made the closure of such widespread posts no longer critical, and the need for training room even makes them desirable. The existing reminders of America's Indian-fighting days are likely to remain for a long time to come.

Progressivism, the Spanish-American War, and a Changing Army

The closing of the frontier, the Spanish-American War, and the emergence of the United States into international politics may have been the most critical factors leading to the emergence of consolidated Army posts. They may not have been, however, the most important elements affecting the organization and appearance of those posts.

In addition to the end of the frontier and the
Spanish-American War, the last decade of the nineteenth
century also saw a rise to dominance of the philosophy
of Progressivism in America. Progressivism was a social
and political mood that demanded a better and more
equitable life for the American citizen. Out of the
chaos of industrial exploitation grew a demand for better
treatment of workers and improvement of the wretched
conditions in city slums. Sympathy for the oppressed
was expressed. Muckrakers drew attention to corruption
and inefficiency in politics and government. Trust-
busting and concern for the little man were the orders
of the day until World War I. Progressivism even came
to the aid of the American soldier. It came not in terms
of support for the standing Army, but in support for the
welfare of the enlisted man.[1]

Enthusiastic demands from American citizens for the
relief of Cuba's oppressed population helped to bring
the nation to war with Spain in 1898. Unfortunately,
not only was the nation unprepared, but the War Department
was as inefficient as any entrenched bureaucracy could
get. The Indian wars had created little demand or

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[1]Indeed, many Progressives were pacifists and very
suspicious of the military, but they sympatized with the
poverty-stricken soldier. For a condensed but thorough
review of the Progressive movement in America, see
Samuel Eliot Morison and Henry Steel Commager, The Growth
of the American Republic, vol. 2 (New York: Oxford
University Press, 1942) pp. 354-384.

opportunity for effective military control from Washington, and public interest in the Army was at an all-time low in the latter years of the nineteenth century (Weigley, 1967, 271). The War Department had become sloppy, and it probably could not have prepared for war with Spain even if the crisis had been seen in advance. The result of many combined elements was confusion and mismanagement that resulted in wasted lives and another national embarrassment (Weigley, 1967, 299-309).

Stories of waste and mismanagement in the war were enough to cause concern among progressive-minded Americans. The real sensation occurred, however, when citizens learned that more soldiers had died from American negligence than from enemy bullets. The Presidential Commission that investigated the war afterwards revealed that only 280 officers and men had been killed in battle during the war. Another 2630 had died for other reasons, mostly disease contracted in temporary mobilization camps (Office of the President, 1899, 10). Although the nonbattle death rate was less than half that of the Civil War, the Spanish-American War was pictured as one of the worst scandals in American military history (see table 6).

TABLE 6

ANNUAL NONBATTLE DEATH RATE
IN AMERICAN WARS
(per 1,000 soldiers)

Civil War	68.7
Spanish-American War. .	25.9
World War I	15.4
World War II	3.0
Korean War	2.0

SOURCE: U. S. Department of Commerce, Historical Statistics of the United States, p. 1140.

One of the targets of the postwar investigation was the mobilization plan; there was none. Volunteers had been crowded into fourteen major camps (see map 20) with little preparation or supervision. Racetracks, fairgrounds, parks, or any other large open areas had been used (Fine and Remington, 1972, 3). Adequate room for all the tents seemed to be the only major prerequisite for the control or comfort of the troops. Within a short while, disease swept through many of the camps, killing soldiers before they ever embarked overseas. The President's Commission reported that there had been attempts to provide sanitary conditions and medical supervision in some of the camps, but these attempts had been far from adequate. The Commission also made some general, if obvious, conclusions that weighed heavily on future mobilizations.

Large bodies of men who are not soldiers, under officers who have had little or no military training, can not be brought together and held for many weeks in camp and remain healthy (Office of the President, 1899, 74).

Perhaps the most important effect that the Spanish-
American War had on Army posts was that it finally
focused the attention of newspapers and the government
on the living conditions of the Army. Not only did
people see the squalor of mobilization camps, but they
also saw the poverty of daily existence for the soldier.
Since 1854 soldiers had lived on thirteen dollars a
month, largely in ramshackle camps that had been built
by their own hands (Dupuy, 1961, 185). The Spanish-
American War brought attention to the Army as well as
providing an impetus for consolidation. It may have
been largely responsible for the improvements in living
conditions for the Army immediately after 1900.

Not all responses toward the Army were sympathetic
after the war. America found itself in the position of
an imperialist nation, and the Philippine Insurrection
did nothing to ease the consciences of the government or
the public. The increased size of the Army and the
increased cost of operation (figures 1 and 2) were
difficult for many Americans to swallow. The old argu-
ments against standing armies resurfaced in the presi-
dential campaign of 1900, and Populist candidate William
Jennings Bryan argued that the expansionist policies of
the progressive Republicans were to blame. Also, Bryan
argued:

> A large standing army is not only a pecuniary burden
> to the people . . . but it is even a menace to a
> republican form of government. The army is the
> personification of force, and militarism will

inevitably change the ideals of the people and turn the thoughts of our young men from the arts of peace to the science of war (quoted in Adler, vol. 12, 1968, 347).

The Policies of Elihu Root

One of the outcomes of the Spanish-American War was the removal of Secretary of War Alger and his replacement by Elihu Root (Weigley, 1967, 312). Root was likely the most influential Secretary of War that ever held the position. His shakeup of the War Department, the creation of a General Staff, and the reorganization of the Army were among his most well known accomplishments (Weigley, 1967, 314-326). The election of President Roosevelt and the appointment of men with the stature of Elihu Root and William Howard Taft signalled the end of the military's bad days and generally poor treatment at the hands of the government. Although there were difficult years ahead, Secretary Root brought the Army out of the poverty it had known in the frontier.

Secretary Root had much to do with changes that occurred at Army posts in the early years of the twentieth century. As a Progressive he was particularly interested in the welfare of the soldier and the efficiency of the Army. When he became Secretary of War in 1899, Root noted that there were still many troops housed in temporary structures of the frontier days, and a few still lived in tents. Soldiers still slept in casements at some of the old coastal forst, although

that practice had been criticized for years by the
Surgeon General (<u>Annual Report of the Secretary of War</u>,
vol. 1, part 3, 1900, 150).

As the Army increased in size at the beginning of
the twentieth century, Secretary Root decided that it
was better "to increase the size of the posts in which
the Army is quartered than to increase the number"
(<u>Annual Report of the Secretary of War</u>, 1902, 266). The
same considerations of economy and efficiency that had
been expressed by previous Secretaries were also used by
Secretary Root, while he also added the consideration
that "the tendency of life in small one and two company
posts is narrowing and dwarfing" (<u>Annual Report of the
Secretary of War</u>, 1902, 266).

Throughout his administration of the War Department,
Secretary Root strove to reduce the number of Army posts
and increase their size. In 1901 he initiated a board
of officers to study and report on the location and
distribution of military posts "required for the proper
accomodation, instruction, and training of the troops"
(U. S. War Dept., 1902, 5). His purpose was to centralize
training and control of the Army. Based upon the results
of this systematic study, Secretary Root recommended to
Congress that the Army should be concentrated at three
or four sites that would be developed into major posts.
Ashland, Kentucky; Grand Island, New York; and Fort Sam
Houston, Texas were preferred locations (Root, 1901, 5).

The guiding principles behind Secretary Root's recommendations were:

> . . . to get the army posts out of the cities and
> towns and establish them upon larger tracts of
> cheaper land in the neighborhood of the same cities
> and towns, so that the men may have the benefit of
> country air instead of city air, and more room for
> training and exercise; . . . (Annual Report of the
> Secretary of War, 1902, 267).

Secretary Root (who had little military experience)
also expressed the need to improve discipline by bringing
the barracks under tighter military control, and by
pushing the brothels and rum shops further away from
the soldiers (Annual Report of the Secretary of War,
1902, 267). Although influenced by this progressive
beliefs, Secretary Root certainly took some advice from
his more experienced Army staff in this regard. His
ideas were curiously similar to the isolationist remarks
of Colonel Sumner, who as commander of the forces in
New Mexico Territory in 1852 had remarked about "the
vicious associations in those towns" (quoted in Frazer,
1963, xvii) (see page 142). Obviously, the incompati-
bility between the Army and civilian society still
existed, even though frontiersmen were no longer the
dominant points of contact for the Army.

As evidenced by Secretary Taft's comments in 1905
(page 193), Congress did not enact all of Secretary
Root's recommendations immediately. Notwithstanding,
Secretary Root's policies set important precedents for
the twentieth century Army post. Selection of sites for

posts in subsequent years were usually based upon
procedures similar to those of Root's board of officers.
Army posts soon were removed (once again) from cities
and towns and placed in the open country with more room
for training. They eventually became the large centers
that Secretary Root had envisioned.

Organization and Architecture of Pre-World War I Army Posts

Even if all of his recommendations were not enacted
during his tenure, Secretary Root was able to produce
some substantial changes in Army posts with the help of
Congress and the persistence of Secretary Taft. A larger
share of the Army's budget was spent on the construction
and repair of posts, and by 1905 that share had grown to
nine percent (table 5). In the same year Secretary Taft
was able to report that:

> The permanent military post of today, with its
> large buildings and commodious quarters, handsomely
> finished and equipped with extensive heating,
> lighting, water, and sewer systems, is much more
> substantial and elaborate than the more or less
> temporary frontier post occupied by the Army until
> within the last two decades (Annual Report of the
> Secretary of War, 1905, 37).

The posts of the era were certainly better than
frontier posts in several respects, but many of them
were little more than improved and slightly expanded
versions of the older posts. Just as the American city
began to grow in a seemimgly disorganized manner around
the old central business district, so too did many Army

posts begin to grow around the old parade field. The simple shapes of the old forts began to disappear in the expansion, and in many cases the parade field was enlarged or reshaped to meet the needs of larger units and larger posts. Irregular street plans, rather than grid patterns, characterized the layouts of these early permanent posts, but the parade field was still the center of attraction. Around it were grouped the officers' quarters and the important administrative functions. In a situation similar to that of poor peoples' homes in preindustrial American cities, the lower ranking soldiers' quarters were pushed toward the fringes of the posts with the more menial administrative functions. Discipline through organization was still apparent, and the social class distinctions between ranks were increasingly evident (see figures 28 and 29).

Apparently, the organization of early twentieth century Army posts was simply a natural outgrowth of traditional military attitudes and needs. No evidence was found to indicate a planned policy to group the higher class functions and quarters around the parade field, while shifting other functions to the periphery. It had long been a policy in the Army that members of different ranks should be kept separate during off-duty hours for reasons of discipline. According to the 1970 Officers' Guide, "In our Army, it is strong tradition that an officer does not gamble, nor borrow money, nor
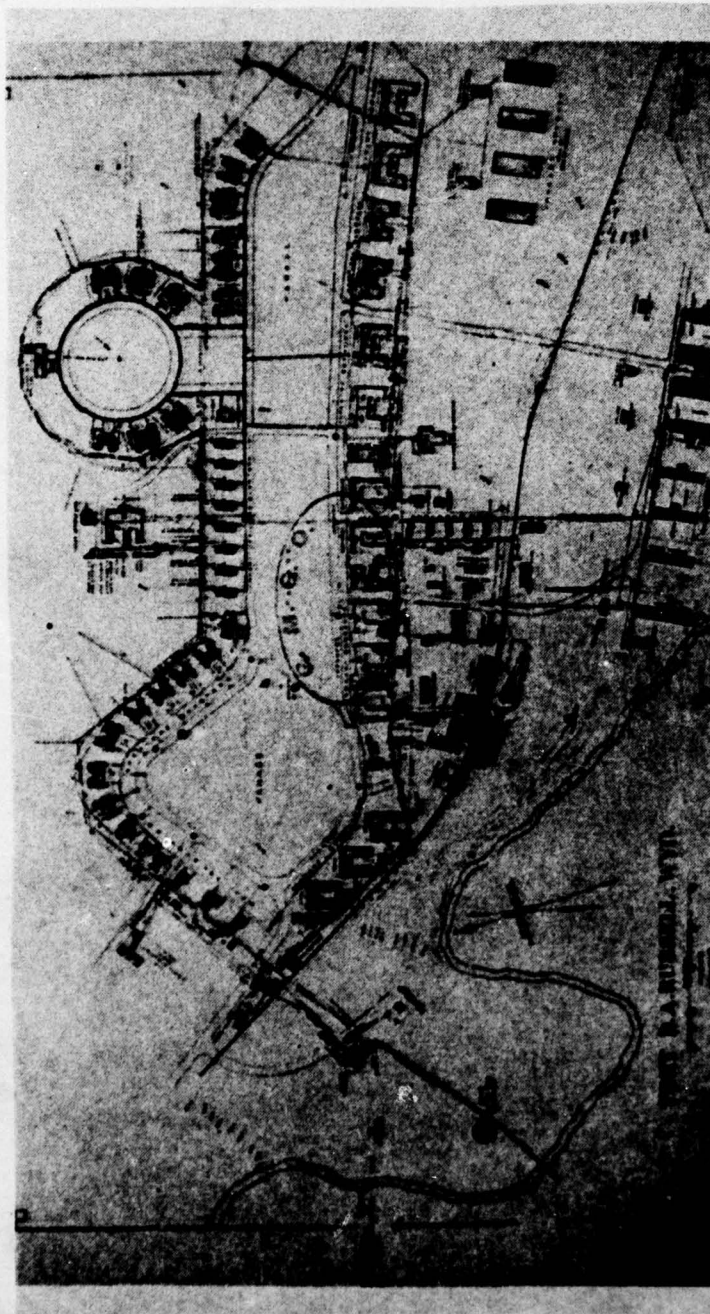
Figure 28. Fort D. A. Russell, Wyoming in 1905. This map clearly shows the original outlines of the post in 1870 (figure 23). Since that time the parade field has been extended in a long strip, along the bottom of which have been placed the troop barracks. Most officers' quarters still encircle the upper half of the old (and more prestigious) parade field, while the headquarters building and highest ranking officers' quarters now occupy their own circle.

SOURCE: U. S. War Department, Office of the Quartermaster General, Military Posts in the United States and Alaska (Washington, D. C.: U. S. Government Printing Office, 1905), p. 47.

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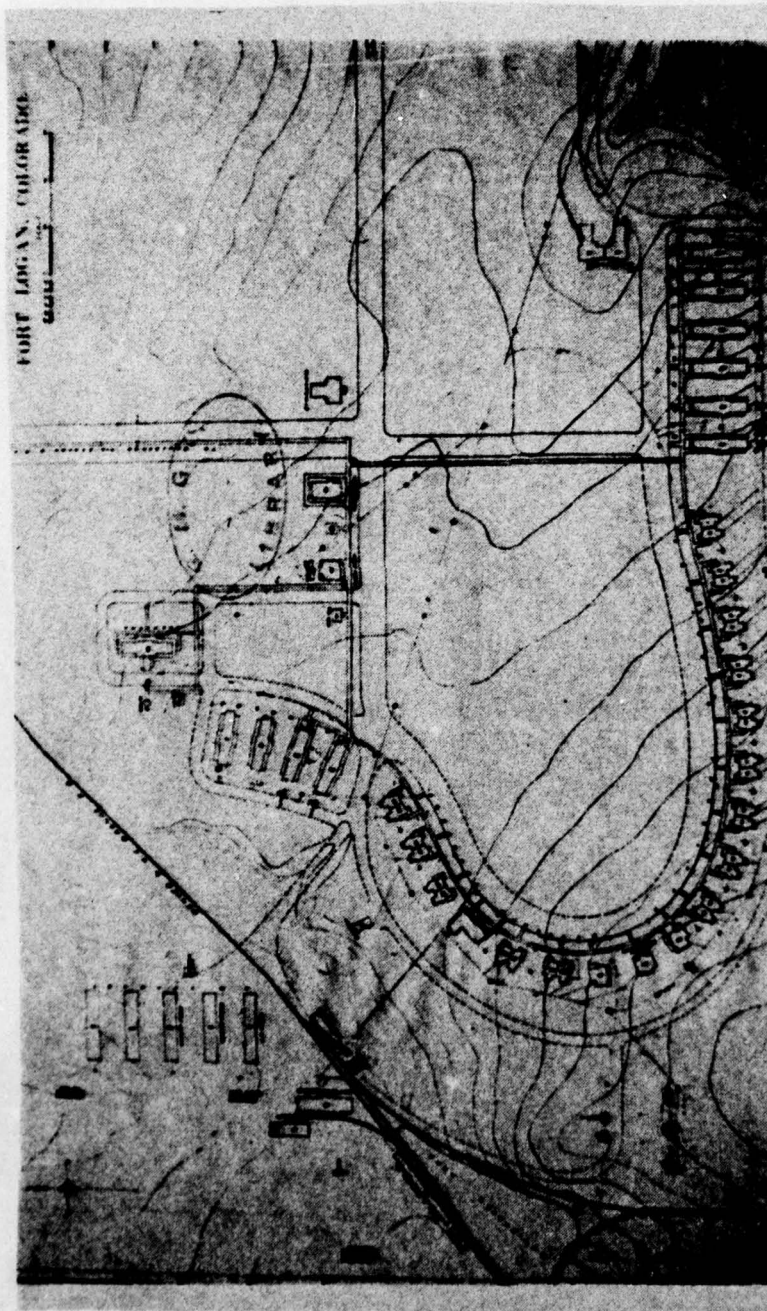
Figure 29. Fort Logan, Colorado in 1905. The layout of this post in 1905 bears almost no resemblance to a small frontier post that it once was. The large parade field and the curved street patterns reveal less emphasis on utility and more emphasis on esthetic values.

SOURCE: U. S. War Department, *Military Posts in the United States and Alaska*.

drink intoxicants, nor participate in ordinary social associations with enlisted men on an individual basis" (Reynolds, 1970, 18). The parade field was one of the best groomed areas of Army posts, and the attraction of this area for those officers in control of the posts may have been as natural as the attraction between high class residential communities and the nicer areas of cities. Also, in the days when horses and walking were still the primary means of transportation for the Army, there was certainly a desire for officers to be near their places of work.[1] The post commander was always housed near the headquarters (and still is today), because he had to be contacted immediately in case of an alert, emergency, or unexpected visit from important officials. Naturally, the commander needed to be able to contact his subordinate officers and collect them quickly. The best way to do this without the convenience of telephones was to have them living nearby. For this reason the organization of Army posts was a function of necessity as well as a func-

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[1]Obviously, many of the same forces that acted on people in American cities also acted on soldiers at Army posts, but they acted under different circumstances. Upper class residents of cities lived near the central business districts until improved transportation allowed them (and many of their jobs) to move away from the growing slums of the inner cities. Army posts did not have industrial concentrations at their centers, nor did they have trolley cars to carry commuters away from their centers. The centers of Army posts retained their park-like appearances, while city centers began the long period of decay that threatens to destroy them and their inhabitants today.

tion of class consciousness. Those elements considered most critical were held at the center of the post, while others were moved to the periphery.

The organization of early twentieth century Army posts may have been allowed to develop largely on its own, but the architecture of buildings was more heavily influenced by official policies and decisions. Throughout the frontier days the War Department had battled high costs, and some of these costs were associated with decentralized control of construction, which led to inefficiency and redundancies. Standardization was attempted with the regulations of 1860, but it failed. New plans were published in 1873, but they also failed to make much impact on the ever-moving frontier Army. In 1875 the Surgeon General reported that Fort Douglas, Utah was the only post that had any buildings constructed according to the 1873 plans (U. S. War Department, 1875, ix). As late as 1884 the Army's medical officers were complaining to the Secretary of War that:

> In order to keep abreast, so far as may be practicable, with the laws of hygiene and sanitary science, it would seem that the time had arrived when something should be done in the way of needed improvements in the construction of barracks, quarters, ... It may be stated that there are no suitable plans of buildings now at hand. Those that were prepared, and in some measure adopted, are crude and deficient in many particulars, notably in containing no arrangements for ventilation, heating, bathing, water supply, and disposition of wastes (Annual Report of the Secretary of War, vol. 1, 1884, 424).

Obviously, much of the credit for improvements in
twentieth century Army architecture belonged to the
military surgeons and the Surgeon General. It was they
who called the 1860 plans "for officers' quarters, good;
for the men's barracks, tolerable; for the hospital,
bad" (U. S. War Department, 1870, xxv). It was they
who denounced subsequent plans to the Secretary of War
in 1884. It was the Surgeon General who fought with the
Quartermaster General in his efforts to save money with
cheap housing, and it was the surgeons who eventually
won the battle by convincing the Secretary of War, and
apparently Congress, that their 1870 argument was valid:

> It has been said that we have the best-fed and the
> worst-housed Army in the world, and the statement
> seems more nearly correct than such generalizations
> usually are. The ultimate cause of the defect is, of
> course, ignorance, the immediate cause being a desire
> for economy, praiseworthy in itself, but producing
> results which are the reverse of its object; for
> savings in boards and bricks, at the expense of the
> health and life of the soldier, cannot be considered
> a commendable thrift (U. S. War Department, 1870,
> xxxii).

Apparently, military surgeons were some of the
original progressives in the country, at least in their
efforts to improve the living conditions of soldiers.
Paradoxically, as Americans were growing increasingly
independent of European attitudes, Army surgeons looked
to Europe for their medical knowledge. It was from the
work of the French Academy of Sciences that these
officers based many of their opinions on health care.
The consideration of ample ventilation as the answer to

respiratory illnesses was one of these opinions that shaped the architecture of buildings on Army posts. Its basis came from work done by the Academy of Sciences as early as 1788 (U. S. War Department, 1870, xxi). Not until World War I, however, was the Surgeon General able to get a requirement placed in building regulations for barracks that specified 720 cubic feet of air per man and sixty square feet of floor space. Even that requirement could be waived in an emergency (Fine and Remington, 1972, 556).

By the turn of the century the War Department was compiling an <u>Album of Building Plans for the Army</u>. The book did not represent a dictation of new architectural styles as much as it did an acceptance of improved styles from earlier years. Notwithstanding, it was a step in the direction of centralized control for Army construction. The War Department hired a civilian advisory architect in 1905 for the first time (<u>Annual Report of the Secretary of War</u>, vol. 1, 1905, 37). Even so, the designs collected in the album from 1899 to 1909 did not differ strikingly in outside appearance from buildings that had been constructed at some of the more permanent posts of the frontier era. Two-story barracks and quarters with full balconies and columns were built at Fort McHenry, Maryland and Plattsurg Barracks, New York in the late 1830's. They existed at Carlisle Barracks,

Pennsylvania before the American Civil War. Quarters
built at Carlisle Barracks by a civilian contractor in
1887 looked similar to plans contained in the Army's
album at the turn of the century. One is reminded also
of the two-story barracks built at Fort Riley, Kansas
after that post had been passed by the frontier (figure
21, page 167). All of these designs bore similarities,
and plans published by the Army at the turn of the
century were not much different (see figures 30 through
34).

The Army posts of the early twentieth century were
healthier and more attractive places to live than their
frontier predecessors. In a very short space of time
they changed a great deal from the posts of the nineteenth
century. Despite the changes, these early permanent posts
were unlike those of later years. They were still small
in comparison to today's posts (table 2). Some, like
Fort Sheridan and Fort McPherson, were surrounded by
growing cities and towns. Others, like Fort D. A.
Russell, were still isolated in the vast expanses of the
West. Some were the remnants of old stone and masonry
forts or the products of the Endicott Board's decision
to spread the coastal forts into numerous small posi-
tions. Others were outgrowths of old frontier forts.
Whether they were coastal forts or interior forts, nearly
all of them were legacies of the conditions in the
previous century. They were products of twentieth

Figure 30. Barracks at Fort McHenry, Maryland. These
barracks were renovated according to plans
used at the fort in about 1837. Two-story
barracks with full balconies and columns
were common at Army posts in the nineteenth
century that were not on the frontier.

SOURCE: Photograph by David W. Rhyne.

Figure 31. Barracks at Plattsburg Barracks, New York
in 1838. The barracks shown here exhibit
some basic similarities to those in figure
30. Although the columns are thicker and
the roof is pitched, the same two-story,
full balcony configuration is there.

SOURCE: National Archives, Record
Group 77.
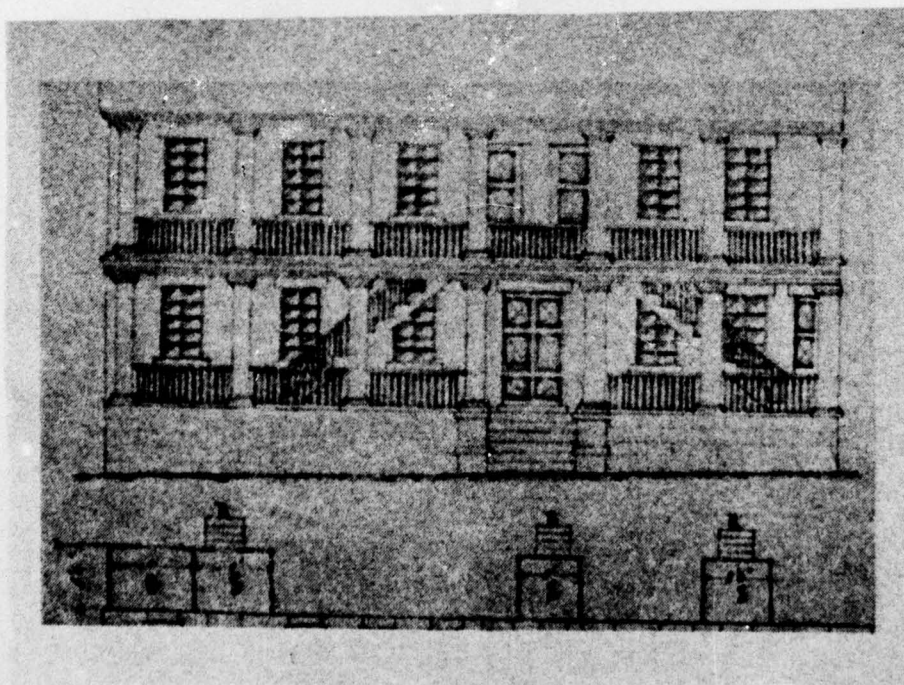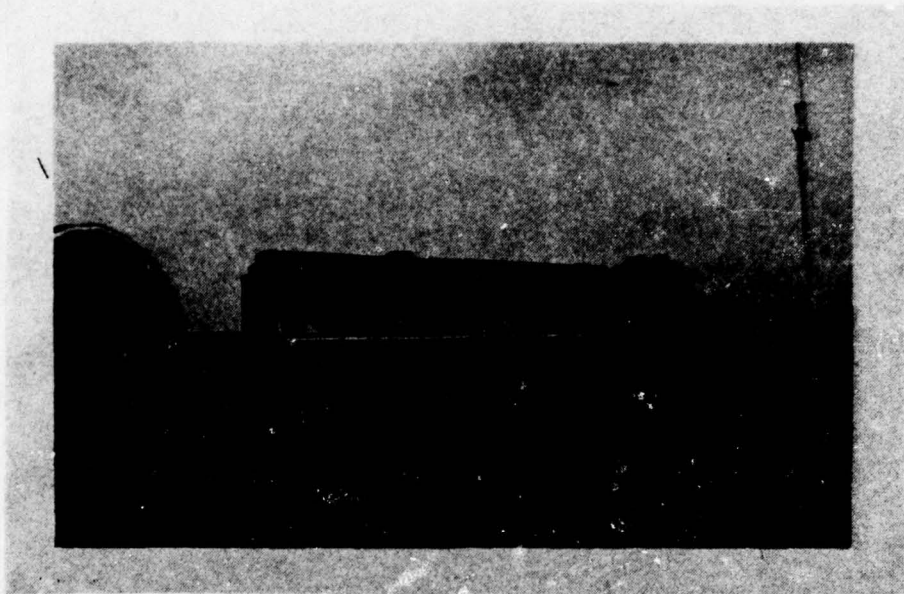
Figure 32.   Coren Apartments at Carlisle Barracks,
             Pennsylvania. According to sources at
             the Military History Institute, these
             apartments were originally built as
             officers' quarters. They were burned
             by Confederate soldiers in 1863 and
             rebuilt using the original plans.

                 SOURCE: Photograph by David W. Rhyne.

Figure 33.   Quarters #3 at Carlisle Barracks,
             Pennsylvania. These officers' quarters
             were built by a civilian contractor in
             1887. They bear a striking resemblance
             to plans contained in the Album of
             Building Plans for the Army in 1900.
             Note again the full balcony and columns.

                 SOURCE: Photograph by David W. Rhyne.
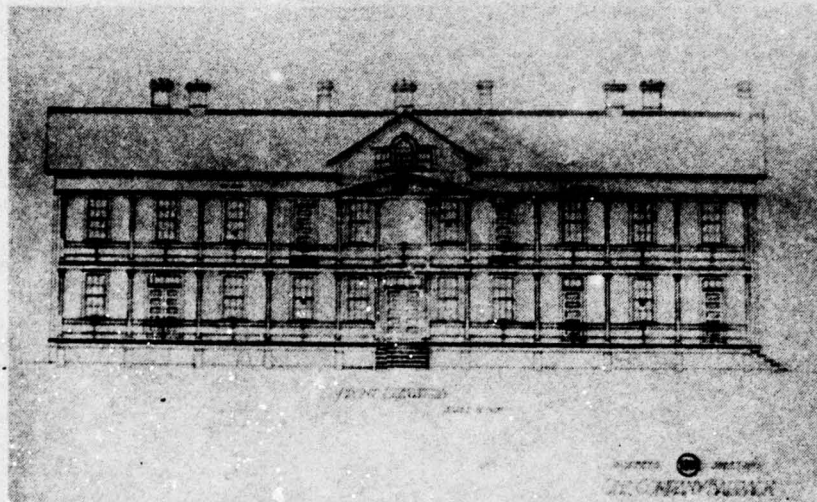
Figure 34.   Plan of One-Company Barracks, 1906.
Secretaries Root and Taft apparently
did not spark any revolutions in
military architecture during there
tenures in the first decade of the
twentieth century. Despite the
many changes and improvements that
occurred in those years to Army
posts, barracks and quarters still
relied on the basic two-story,
bull balcony design with columns.

SCURCE: U. S. War Department,
Office of the Adjutant General,
Album of Building Plans for the
Army (unpublished collection of
plans from 1899 to 1909).

century ideas about health and welfare that were applied
to nineteenth century situations. The real effects of
twentieth century international involvement were yet to
be felt.

<u>World</u> <u>War</u> <u>I</u> <u>and</u> <u>the</u> <u>Army</u> <u>Post</u>
Mass Production and Mobilization

If ever there was a single, cataclysmic event that
put a permanent imprint on the design, construction,
location, and size of the modern Army post, that event
was the entrance of the United States into World War I.
Before this time the construction of Army posts was
largely decentralized. Even under Elihu Root's admin-
istration the evolution of more permanent posts had been
little more than an expansion of selected frontier forts
and seacoast installations. The arrival of World War I
changed all of that. America's decision to suspend its
isolation from Europe and enter the war was not made
until the Germans declared unrestricted submarine war-
fare. No plans for raising and outfitting an Army had
been given serious thought. As late as 1916 President
Wilson had been outraged to learn that the War Department
was conducting war games against Germany. When war was
declared on 6 April 1917, the United States was less
prepared than it had ever been, particularly against such
a major power as Germany (Weigley, 1967, 352-353).

The desire to remain free from European entangle-

ments was so deeply ingrained in American tradition that it had overpowered any ideas of preparation. When the decision was finally made to enter the war, drastic measures had to be taken to get an Army to France before that country collapsed. Public sentiments against military spending were suspended under the emergency, and the nation threw its industrial might into the war. Figure 2 (page 16) reveals that fifty percent of government spending went to the Army in the peak year of the war. Another ten percent went to the Navy. Although these percentages were considerably lower than in any of the major wars of the nineteenth century, the United States was not the same country it had been even as late as the Spanish-American War. More than thirty billion dollars were spent in the two peak years of World War I, compared to less than four billion dollars through five years of the Civil War, and little more than one billion dollars in the Spanish-American War (U. S. Department of Commerce, 1975, 1114).[1] For the first time in its history the nation was able to go into a war on the basis of near total mass production, and one of the products of industrialization was the mobilization camp.

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[1] Translated into the standard price index for 1958, these figures represented $13 billion for the Civil War, $4.5 billion for the Spanish-American War, and $56 billion for World War I (price index obtained from U. S. Department of Commerce, 1975, 224).

Planning for Mobilization Camps

In order to save the Allies from defeat, the United States determined that it had to send a trained Army of more than 1.5 million men overseas within a very short period of time (Weigley, 1967, 356). Before 1918 ended the total strength of the Army actually reached nearly 2.5 million soldiers (figure 1). Barely enough housing existed for the 50,000 men in the Regular Army at the beginning of the war, and there was certainly not enough room on the existing posts to train the mass armies needed for Europe. Mobilization and training had to be conducted at large camps built specifically for the purpcse, and the memories of the recent Spanish-American War dictated that such camps would have to be healthy places for America's soldiers.

The government and the nation acted with uncharacteristic speed under the emergency conditions. Six days after the declaration of war with Germany, the government declared an emergency construction program and suspended requirements for advertising and competitive bids (U. S. War Department, 1918, 17). In May a Cantonment Division was organized out of the old Construction and Repair Division of the Quartermaster Corps with the job of planning and supervising the construction of mobilization camps (World War I Group, 1949, 155). Plans for the camps were prepared, and sites were selected between 24 May and 17 June 1917 (U. S. War Department, 1918, 17).

By July an army of 160,000 civilian workers had been organized with the help of the American Federation of Labor, and they were busy building camps. By 5 September all the camps were substantially completed and ready to receive the first group of draftees, who were brought in under only the second conscription law ever used in the United States. Within a period of only five months from the declaration of war, all the planning and construction for the camps had been completed. There were sixteen National Army Cantonments for the draftees and sixteen National Guard Camps, each capable of training and housing approximately 40,000 soldiers at a time. By the end of the war, housing for more than 1,736,000 soldiers had been built under 581 projects at a cost of more than one billion dollars (Fine and Remington, 1972, 14-26).

Much of the work toward mobilization was conducted by civilians instead of military personnel, and the planning and construction of the Army's camps was a prime example. The Army lacked the qualified architects to handle the job, so the government looked to the civilian community for help. William A. Starrett, president of a major architectural firm in New York, was recruited to head the committee responsible for organizing and super-vising construction of the camps. Starrett discovered that working within the formalities and close scrutiny of a military organization was too slow and cumbersome for his pleasure, so he found ways to work around the

Army. He recruited some of the best civilian contractors to work for him, and he established direct communications with some of the largest construction companies in the country (Fine and Remington, 1972, 8-9). Starrett's ability to separate his activities from military control was aided by the emergency situation, and within a year his committee was brought together under the Construction Division of the Army, which reported directly to the Secretary of War instead of going through other military channels (World War I Group, 1949, 155).[1]

Locations and Appearance of Mobilization Camps

In part because of material and time constraints, and because it was realized that the National Guard would be released from federal control after the war, the sixteen National Guard Camps used in World War I were built using tents. With their organized street plans, wooden platforms for the tents, sanitary facilities, and a few wooden buildings for administration and recreation; these

[1]The Construction Division was not entirely a civilian organization. In fact, its chief was an Army officer, and it employed military architects and engineers. It was able to remove itself from normal military reporting procedures, however, and it was strongly influenced by civilians, many of whom were also heads of major industries. It was also affected by the speed involved in planning and construction and by the suspension of normal financial supervision. The connections between government and industry, plus the profits that some industries accumulated as a result of the war, had much to do with the charges of waste, corruption, mismanagement, and profiteering that followed World War I (Fine and Remington, 1972, 26-32).

camps were certainly better than those of the Spanish-
American War. They were, however, exactly what the name
implied. They were temporary camps used to train the
state militia units, and they had little impact on the
postwar distribution of the Regular Army. A few of them
survived into the next two decades as training sites, but
only one (Camp McClellan, Alabama) was promoted to the
status of a permanent fort after the war. The most
significant feature about these camps was that they were
all located in the southern half of the country, and most
of them were in the Old South (see map 21). Cooler
temperatures in the North were not considered suitable
for these tent camps (U. S. War Department, 1918, 15-20).

If the National Guard Camps had little impact on the
postwar Army, the National Army Cantonments had much
greater influence. Because they were used to house the
nation's drafted soldiers, these camps were built more
substantially than those of the volunteer state units.
Wood was used as the major material. As a result, the
camps could not just be folded away after the war. Most
of them were auctioned between 1921 and 1926, but five
of them remained as permanent posts for the Army. These
five were Camp Lewis, Washington; Camp Devens, Massachu-
setts; Camp Dix, New Jersey; Camp Meade, Maryland; and
Camp Custer, Michigan (Fine and Remington, 1972, 9).
Camp Jackson, South Carolina became a National Guard
training camp after the war, but it was reactivated in

Map 21. Mobilization Camps of World War One. The massive construction program
of World War I produced thirty-two mobilization camps, each capable of
training a complete Army division at one time. The National Guard
Camps were located in the South, so that cold weather would not have
as much effect on training and health of the units housed in tents.
National Army Cantonments had wooden barracks, and they were distri-
buted more equitably throughout the East. All of them were located
near major population and transportation centers, and only two were
constructed on existing military reservations.

SOURCE: World War I Group, Historical Division, Special Staff of
the United States Army, Order of Battle of the United States Land
Forces in the World War (1912-1919), vol. 3, part 1 (Washington, D. C.:
U. S. Government Printing Office, 1949), p. 172.

MOBILIZATION CAMPS OF WORLD WAR ONE

Lewis

Fremont

Kearney

Cody

Lewis

Grant

Custer

Dodge

Sheridan

Taylor

Funston

Doniphan

Bowie

MacArthur

Pike

McClellan

Shelby

Beauregard

Logan

Travis

Sheridan

Wheeler

Hancock

Gordon

Sevier Jackson

Wadsworth

Greene

Meade

Lee

Dix

Upton

Devens

500

0

Miles

○ National Army Cantonments

● National Guard Tent Camps
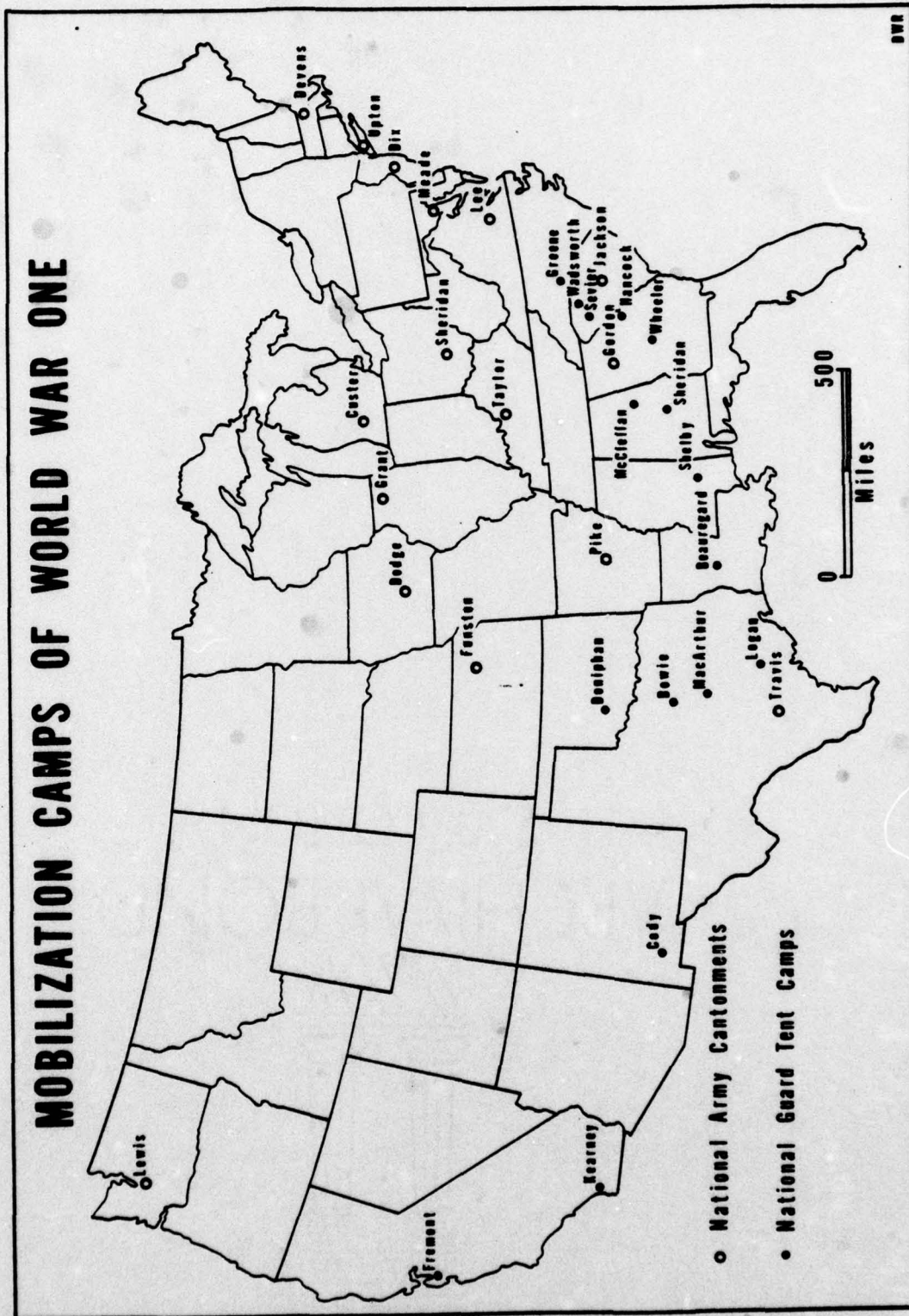
1940 and has remained a permanent post since. Camp Lee, Virginia was reclaimed by the government in World War II from its status as a wildlife preserve and has also remained a permanent post since that time (Scanlan, 1963, 105 and 127). Of all the camps mentioned above, only Camp Custer is not a major post today.

Three other of today's important Army posts had their beginnings in World War I. They fit in neither of the major categories mentioned above. Camp Belvoir, Virginia had its beginnings as a rifle range for troops from Washington Barracks (Scanlan, 1963, 12). Camp Bragg, North Carolina started as an artillery firing range in 1918 (Scanlan, 1963, 26). Camp Benning, Georgia was selected as the site for the consolidation of the Army's infantry training schools in 1918 (Scanlan, 1963, 15-16). It still served that purpose in 1979.

The war in Europe acted as a major catalyst that finally brought the end to many former frontier posts and shifted the bulk of Army posts away from the West. The traumatic nature of this shift was evident by the fact that only two of the sixteen National Army Cantonments (Camp Lewis and Camp Funston) were built on sites of previously existing military reservations (World War I Group, 1949, 174). Most of the camps were located in the East, since it was easier to assemble troops in areas that had better transportation facilities and were closer to the major population centers. Additionally, the

important ports of embarkation for Europe were on the
Atlantic coast. There was little evidence that politics
played a major role in site selection, since the emer-
gency conditions forced Congress to temporarily lose
much of its influence in military matters. Decisions
as to which camps would remain opened after the war may
or may not have been politically motivated, but initial
site selections were made almost entirely within the
War Department (U. S. War Department, 1918, 39). Also,
most of the camps were originally designed as "temporary
buildings and mobilization camps" (U. S. War Department,
1918, 17). They were not expected to have a lasting
effect on the Army once the war was over. Nor could
local politicians have recognized beforehand the sub-
stantial economic impacts that some of these large posts
would have in the years following the war.

The mobilization camps of World War I were unlike
any previous Army posts in American history. In size
alone they were markedly different. Fort Riley, Kansas
was reported to be the largest permanent post of the pre-
war years, and its population was only about 1,300
soldiers (Fine and Remington, 1972, 5). The mobiliza-
tion camps were more than thirty times larger than this.

The organization and architecture of these posts
were also very different from previous posts, as was
their purpose. They were built in response to a tempo-
rary crisis. In order to meet that crisis, the posts had

to be built rapidly, and the industrial capacity of the nation allowed their successful completion. They were mass production Army posts, and they looked the part.

Only two organizational plans were drawn for the mobilization camps, a U-shaped plan and a rectangular plan (see figure 35). Every camp had to fit one of these plans, although minor revisions could be made by the "constructing quartermaster" (U. S. War Department, 1918, 5) at each site. The posts were organized to train a standard Army division, and they had a standard appearance about them. Naturally, each post had its parade field. The division headquarters and other important buildings were located as near to the center of the post as possible to facilitate control and to make them accessible to the rest of the post. Each of the brigades and regiments was separated from one another in its own distinct section of the post, and within each of these major subdivisions each of the subordinate level organizations had its own distinct area.[1] Like the organization of the subordinate elements themselves, these subdivisions of the posts facilitated discipline and control within each level of the division, and the post commander or

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[1] The modern concept of armies in western society considers the division as the basic element of organization. Each division may have from two to five brigades (or regiments until recent years); each brigade may have from two to five battalions; each battalion may have two to five companies, etc.

Figure 35. Plan of Camp Lee, Virginia in 1917. This U-shaped plan shows the basic configuration of this National Army Cantonment. The scale is too small to pick out much detail, but the separate areas for each of the major unit subdivisions (regiments) are visible. The small rectangles within each major block would have been for companies. The only difference between this plan and the rectangular plan was that the regiments were placed in parallel rows in the latter instead of a semicircle.

SOURCE: U. S. War Department, Construction Division, National Army Cantonments, Plans and Photographs (Washington, D. C.: U. S. Government Printing Office, 1918), plate 29.

his staff never had any doubts about where they needed to go in order to find particular units or activities. As was the case on frontier posts and early permanent posts, the more mundane services (such as warehouses, remount stations, and hospitals) were located toward the periphery of the posts.

The architectural styles of the buildings were the most visible symbols of mass production on the posts. The only difference between the buildings of different posts was that those in northern climates had more insulation (U. S. War Department, 1918, 5). Wood was used as the primary construction material. It was fast and easy to use, inexpensive in comparison to other materials, and readily available. It also had a very temporary quality, when it was not properly treated and cared for. Plans were drawn for administrative buildings, bakeries, band barracks, guard houses, laundries, mess halls, post exchanges, troop barracks, commanding officers' quarters, company grade officers' quarters, lieutenants' quarters, bachelor officers' quarters, noncommissioned officers' quarters, examination buildings for newly arrived soldiers, stables, and warehouses. Differing styles and sizes of buildings continued to reveal functions and rank structures (U. S. War Department, 1918, 17-18) (see figures 36 and 37). Construction was so standardized that the Construction Division eventually published its own Manual of the Construction Division of the Army,

Figure 36. World War I Mobilization Camp under Construc-
tion. The qualities of mass production are
evident in this picture of World War I
barracks. Even the name given to the archi-
tectural style was indicative of something.
It was called simply Series 600. Improved
sanitary conditions are evident by the
outdoor latrines located between barracks.

SOURCE: U. S. War Department, National
Army Cantonments, Plans and Photographs, photo
of Camp Dix, New Jersey.

Figure 37. World War I Hospital at Camp Taylor,
Kentucky. Interconnecting buildings of
the World War I hospital produced miles
and miles of corridor. The isolated wards
were apparently meant to prevent the spread
of disease. The French Academy of Sciences
first recommended the Pavilion Plan as early
as 1788, and the Surgeon General recommended
it in 1870 (U. S. War Department, 1870,
xxi).

SOURCE: U. S. War Department, National
Army Cantonments, Plans and Photographs, photo
of Camp Taylor, Kentucky.
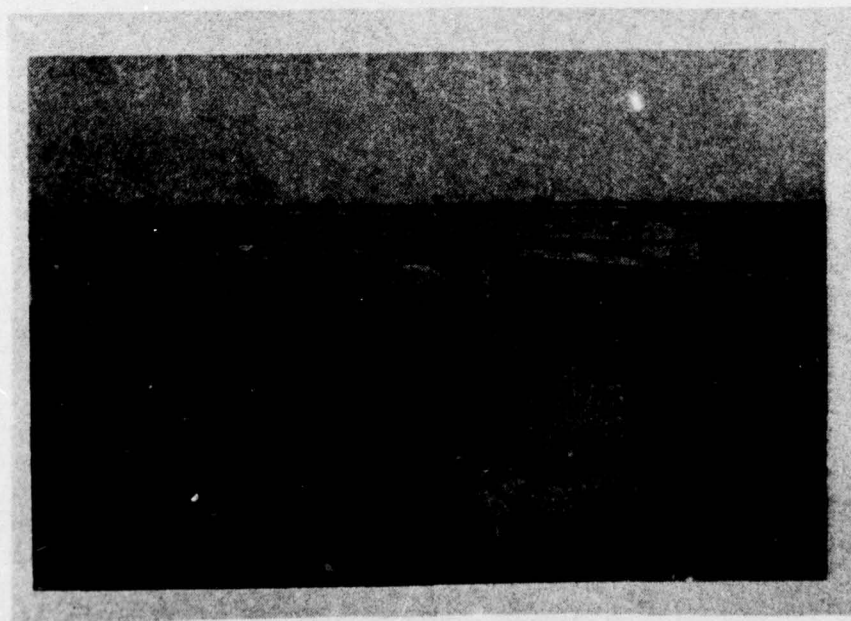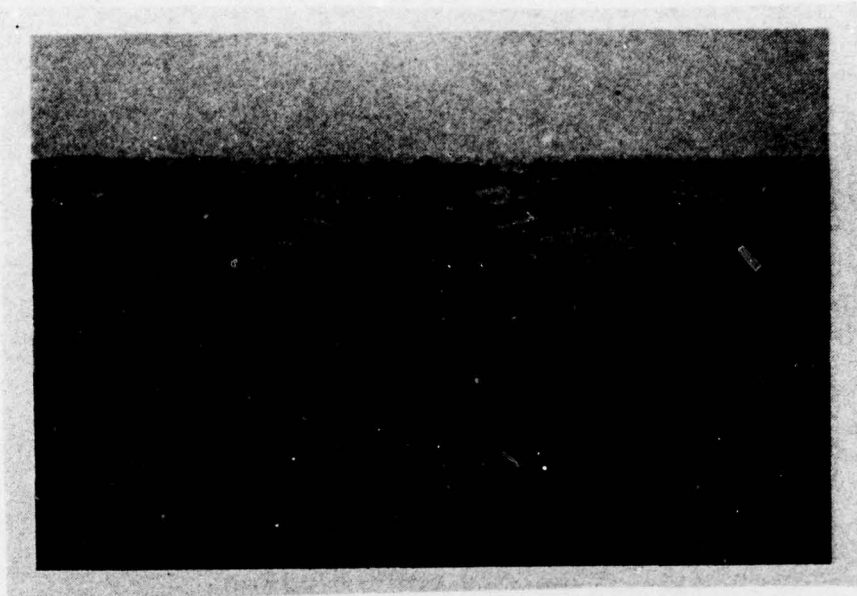
which outlined just about everything needed to build
a mobilization camp.

The camps and cantonments of World War I were
everything that a modern, self-sufficient Army needed
to prepare for war. Though many of them were built near
major towns, each post was designed so that it could
operated independently from the civilian community.
Unlike the early days of the Indian wars, there was
obviously no thought given to housing the troops in
rented buildings around the towns. The Army was much
too large for that, and no towns were capable of shoul-
dering such a burden. With the numbers of troops in
each camp, and the need to train them in a hurry, it was
much easier for the Army leaders to teach the ways of
military discipline and comraderie, when the soldier was
separated from the undisciplined civilian community.
The thoughts of Colonel Sumner and Elihu Root had not
changed in that respect; in fact, the emergency con-
ditions only served to intensify such thoughts. The
ideas of Emery Upton were at their peak, and they were
reflected in the Army posts of World War I.[1]

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[1]Major General Upton was a veteran of the Civil
War and a dedicated professional soldier. Partly as a
result of his observations of the powerful German army
of the 1870's, Upton wrote the first major exposition on
military policy in American history. He advocated that
United States military policy should be centered around
the Regular Army, which he felt had proven superior to
militia forces in previous wars. He also felt that
civilian control of the Army was excessive and caused

Between the World Wars

Reaction to the War

Following World War I, Americans attempted to retreat into the isolation they had known for most of the nation's history. World War I created a reaction that was perhaps more pervasive and more negative than that of the Spanish-American War. It was not so much a reaction against sloppy military operations or poor treatment of soldiers, but rather a reaction against anything that got the country involved in the war, or anything that helped perpetrate the war. Industry was a prime target, and Starrett's handling of the Committee on Emergency Construction was seen as a means of enriching the construction industry at the expense of the taxpayers. Several investigations were conducted in the years following the war, and Starrett and others were accused of virtual treason.[1] Even the Army Corps

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military weakness. Such arguments intensified the rift between the Army and civilian society. Interestingly, it was Secretary Root who encouraged publication of the work in 1904 (Weigley, 1967, 275-281). See Emery Upton, The Military Policy of the United States from 1775 (Washington, D. C.: U. S. Government Printing Office, 1904).

[1] Senator McKellar of Tennessee led the attack against the Construction Division early in the war. In late 1917 the Senate Military Affairs Committee launched a formal investigation into alleged waste and corruption. In July 1918 the Board of Review of Construction, headed by Francis Blossom, began an investigation that lasted for a year and reported no evidence of corruption. When the Republicans gained control of the government in 1919, Representative McKenzie of Illinois headed another subcommitee

of Engineers, which had long been in dispute with the Quartermaster Corps about authority over Army construction, accused the Construction Division of mismanagement and corruption. In 1920 the Construction Division was disbanded. As late as 1934 Senator Gerald Nye headed an investigation that blamed World War I on the bankers and "merchants of death" (Fine and Remington, 1972, 70). Feelings of pacifism and isolationism reached fever levels.

Rapid demobilization and a severe cut in Army spending followed World War I (figures 1 and 2). By 1923 the Army had been reduced to 118,000 soldiers, and it never got higher than 130,000 until the mid-1930's. There were not enough people to occupy and maintain even the few former mobilization camps that were not auctioned, much less the numerous other permanent posts. Money for construction was equally scarce. The Secretary of War was compelled in 1921 to place a five hundred dollar limit on any construction without his personal approval (Fine and Remington, 1972, 44).

Efforts by the War Department to further reduce the number of Army posts and concentrate the Army on a few posts failed. Despite the skeleton Army occupying these

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investigating construction in World War I. His final report indicated widespread corruption and mismanagement throughout the Construction Division and American businesses (Fine and Remington, 1972, 26-32).

posts, they still provided some jobs and money to their surrounding communities. Pressure was put on congressmen to keep them open. Lack of maintenance money and man-power, however, led to the collapse and decay of buildings, and by the middle of the 1920's local news-papers were beginning to spread stories about America's "homeless Army" (Fine and Remington, 1972, 46). The Secretary of War wrote discouraging reports about the conditions of life in the Army, and it seemed as though the status of military life had reverted to the days of the frontier.

> The situation of the Regular Army is extremely serious. Poor housing conditions and the excessive fatigue which the upkeep of the wooden barracks involves has not been conducive to esprit . . . . The rate of desertion remains at a very high and discouraging percentage . . . (Annual Report of the Secretary of War, 1925, 17).

Finally, the scandal of the soldier's life reached proportions similar to those of the period after the Spanish-American War. Public sentiments that had gone against the Army after World War I were turned once again in favor of the soldier's welfare by reports that nearly half of the Army was housed in tents or dilapidated wooden barracks (Annual Report of the Secretary of War, 1928, 5). In 1928 the dearth of construction money ended. Although the Army's share of total government expenditures enjoyed only a modest increase (figure 2), the appropriations for construction of barracks and quarters were significantly larger than at any time

during peace (table 5). The Secretary of War gratefully
reported in 1928 that "Congress, with most commendable
zeal, has made possible the inauguration of a housing
program of considerable scope" (Annual Report of the
Secretary of War, 1928, 5).

The Building Program of 1928

The building program that was begun in 1928 left a
unique imprint on the Army posts of America. Like the
efforts of Elihu Root, it was an ambitious effort
designed to improve the quality of the soldier's life
and the image of the Army. Unlike the isolationist
tendencies of the early twentieth century Army, the
program of 1928 appeared to be an effort to bring the
Army into closer touch with civilian society. The Army
was nearly three times larger than its predecessor of
1900, and the ability to attract people into such a
volunteer force was important. One way to do this was
to make Army posts more attractive.

When money became available to Army architects, they
lost no time showing what they could do. Ever since the
Civil War, Americans had been moving closer toward a
national culture, a move reflected in the rapid spread
of national architectural styles. Army architects recog-
nized these styles and accepted them for their building
program in 1928. Georgian styles, with slight variations
between the Virginia and New England versions, were

adopted for Eastern posts. Spanish architecture was
used in Florida and the Southwest (Wheaton, 1928, 11).
One source even reported that French provincial styles
were used in Louisiana (Fine and Remington, 1972, 48),
although no Army architects of the period mentioned the
use of such styles for barracks or quarters (figure 38).

Principles of economy and military organization were
certainly not forgotten, but Army architects seemed to
bask in their newly discovered ability to produce some-
thing other than the almost purely functional Army posts
of previous years. One architect established several
laws to be considered in the construction of Army posts,
and he likened the planning of a post "to that of modern
city planning" (Nurse, 1928, 14). He divided the Army
post into three functional areas; operations, planning,
and housing (Nurse, 1928, 16). Although previous posts
had obviously been organized in functional areas, one
wonders if it was more than coincidence that these laws
of organization were established only twelve years after
New York City's landmark zoning laws (Warner, 1972, 29).

According to the principles of the Army architects,
it was the designer's job to build a post that would
produce a "Happy Garrison" (Nurse, 1928, 15). Main
streets were to be broad and direct, while those in
housing areas should be narrow and should fit the con-
tours of the ground to provide a pleasing appearance.
The importance of open spaces and park-like appearances
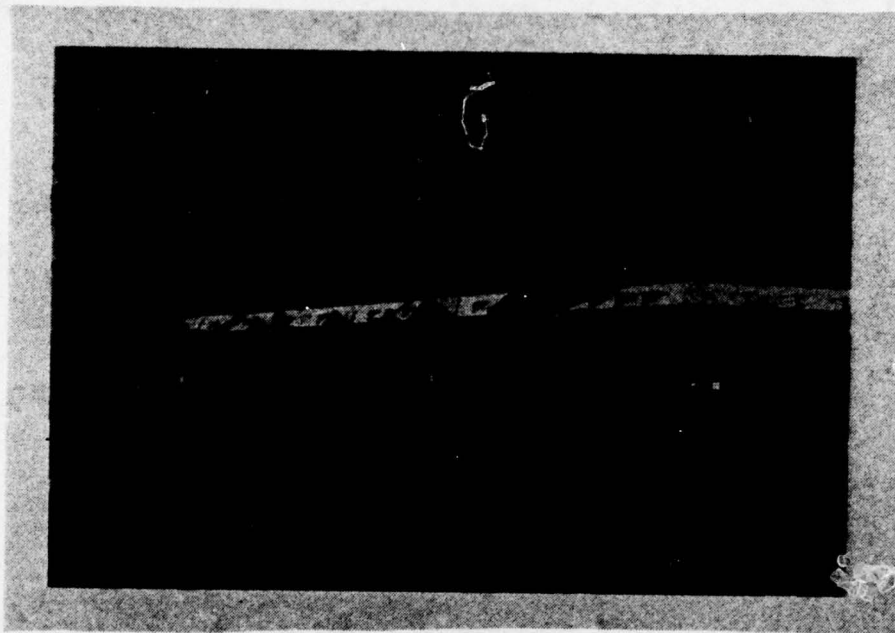
Figure 38. Georgian Barracks at Fort Devens,
Massachusetts. These brick barracks
were built during the widespread
construction program of 1928. It
is certainly easy to recognize their
Georgian features. These were among
the first permanent barracks built
at this former National Army
Cantonment.

SOURCE: Photograph by David
W. Rhyne.

was stressed, while the growing importance of auto-
mobiles was reflected in the emphasis on parking areas
near public buildings (Nurse, 1928, 16).

While there was an obvious attempt to bridge the
gap between the Army and civilian society, the posts
of 1928 could never look exactly like American cities
and still fit the functional needs of a military
society. The architectural styles that were chosen
were sober and responsible. They were similar to styles
that appeared on college campuses and in other public
buildings of the period. They were meant to be
impressive, and they were certainly permanent. They
were symbols of the growing relationships between the
nation and its military society.

The program that began in 1928 lasted until pre-
parations for World War II began. Even though the Great
Depression helped give the Army its smallest share of
the government budget in the history of the nation
(figure 2), Army construction managed to continue
steadily (largely through the Works Progress Admin-
istration). In 1935 the Secretary of War was able to
report:

> While there must still remain in use many of
> the dilapidated structures that the Army had been
> occupying since the World War, a large portiom of
> them have been replaced by modern buildings (Annual
> Report of the Secretary of War, 1935, 54).

The Army Post and World War II

Preparations for Mobilization

In 1930 an American journalist wrote:

> Isolation is a myth. We are not isolated
> and cannot be isolated. The United Stated is
> ever present (quoted in Adler, vol. 15, 1968, 56).

While most Americans wished and tried to return to
the isolation of pre-World War I America, there were
some who realized that the days of national independence
from Europe were over. Throughout the growing turmoil
of the 1930's in Europe and Asia, the United States
struggled over the issue of isolation. Depression
gripped the land, and there was a strong tendency to
ignore the rest of the world and concentrate on problems
at home. Despite all the indications that the nation
would become involved in battle, the attack at Pearl
Harbor caught much of the nation by surprise. The modest
preparations that had been made were far from adequate
for a war that would permanently alter America's per-
ception of the world.

America's unpreparedness for World War II reflected
itself as it had in World War I by the mass production
of an Army and its mobilization camps. Unlike World
War I, some planning had been conducted prior to the
declaration of war, but the rush of building that
occurred in 1941-42 was very similar to what had occurred
in 1917. This time, however, the efforts were much
larger, and the results were even more permanent.

Bitter memories of the investigations that followed World War I led many military planners to take a step backward in time and shun mobilization plans of a similar type. Instead, plans in the late 1920's called for a Spanish-American War style of mobilization in fairgrounds, racetracks, parks, and other local open areas (Fine and Remington, 1972, 65-67). Some planners in the Quartermaster Corps drew designs for new mobilization barracks, but lack of money and support hindered efforts to complete detailed plans and estimates. As tensions in Europe increased, however, the plans for mobilization barracks received more support and emphasis within the War Department. By 1938 the building plans were largely completed and approved (Fine and Remington, 1972, 69-100).

Following the outbreak of full-scale war in Europe in 1940, construction of mobilization barracks began in earnest, and it continued throughout the war. The long term dispute between the Quartermaster Corps and the Corps of Engineers was finally resolved. One week after the attack at Pearl Harbor all Army construction was turned over to the Corps of Engineers. Before the end of the war more than 27,000 projects had been completed at a cost of $15.3 billion. A work force of one million laborers was employed to build enough housing for 5.3 million soldiers, and in the course of the war two different styles of barracks were designed and built (Fine and Remington, 1972, 18).

Mobilization Barracks of World War II

In many respects the mobilization barracks of World War II were strikingly similar to those of World War I. The plans that were approved in 1938 and used until about 1941 were awarded the uncolorful designation of Series 700, in deference to the equally mundane World War I designation of Series 600. Like the buildings of the previous war, those of World War II were made of lumber. Mobilization barracks in both wars were designed as temporary structures, and in both cases, the haste with which the camps were built resulted in many structures erected with green lumber (Fine and Remington, 1972, 73).

Unlike the barracks of World War I, most of the buildings and camps of World War II did not disappear at the end of the fighting. Thanks to the Korean War and the Cold War, more of them remained in existence for longer periods of time, and many of them are in full or partial use today. Others just stand by and slowly collapse into scrap lumber. On practically any Army post (and many universities) in the country today, these buildings stand as testimonials to the efforts of nearly forty years ago.

There were several differences between the mobilization camps of the two World Wars. Technological innovations and improvements were made. Central heating

and indoor latrines were added to the Series 700
barracks. Garages replaced stables and remount stations.
Wooden canopies were added over the windows to reduce
premature decay (see figures 39 and 40). When the Corps
of Engineers took over construction in 1941, the Series
800 barracks followed, and further changes were made.
Heating systems were improved, and lumber shortages
forced the use of more cement and brick (see figure 41)
(Fine and Remington, 1972, 116).

A major difference between the buildings of the two
wars was that the new buildings were placed upon concrete
foundations, and most of them were treated to prevent
termites (Fine and Remington, 1972, 116). This indication
of semi-permanence was in sharp contrast to arguments
before 1941 that the buildings should not even be painted
in order to save money (Fine and Remington, 1972, 172).
Whether the buildings were planned as more permanent
structures or not was unclear, but their designation as
temporary buildings and the arguments against painting
them indicated they were not. In any case, the buildings
of World War II did serve a long-range purpose.
Some of them are likely to remain in use for many years
to come.

Organization and Locations of Camps

When the Series 700 plans were approved in 1938,
the planners did not yet know how the Army would be

Figure 39. Series 700 Barracks at Fort Devens,
Massachusetts. These World War II
buildings are currently in use as
administrative offices. They have
obviously been well maintained over
the years and have had many improve-
ments, such as storm windows.

SOURCE: Photograph by David
W. Rhyne.

Figure 40. Series 700 Barracks in Decay. Numerous
World War II barracks have been abandoned
and are awaiting final destruction. Those
in this figure are also located at Fort
Devens. Note the central heating system.

Source: Photograph by David
W. Rhyne.
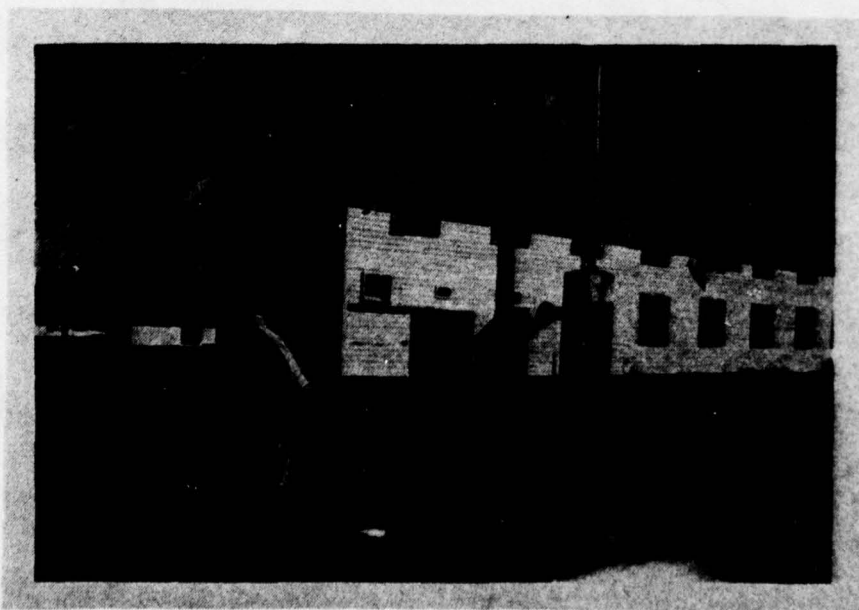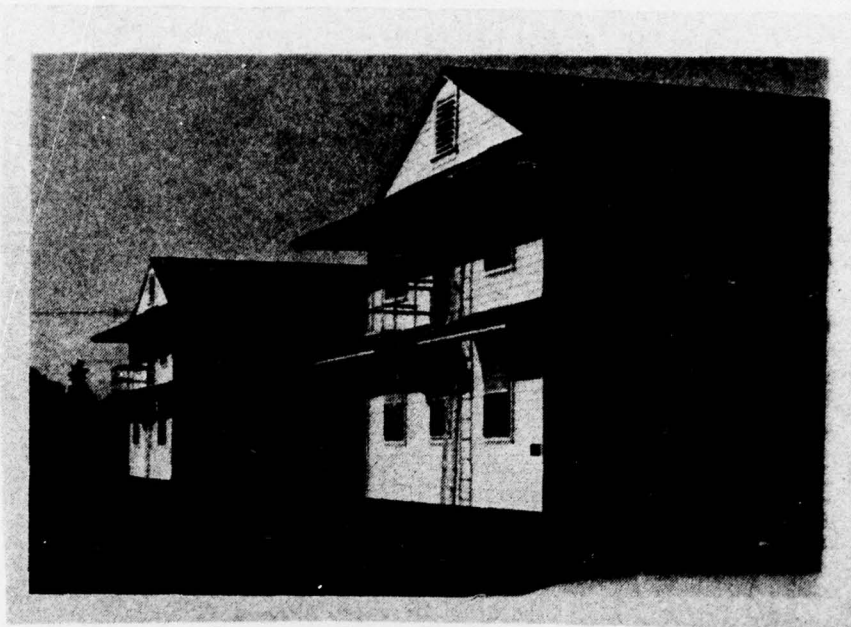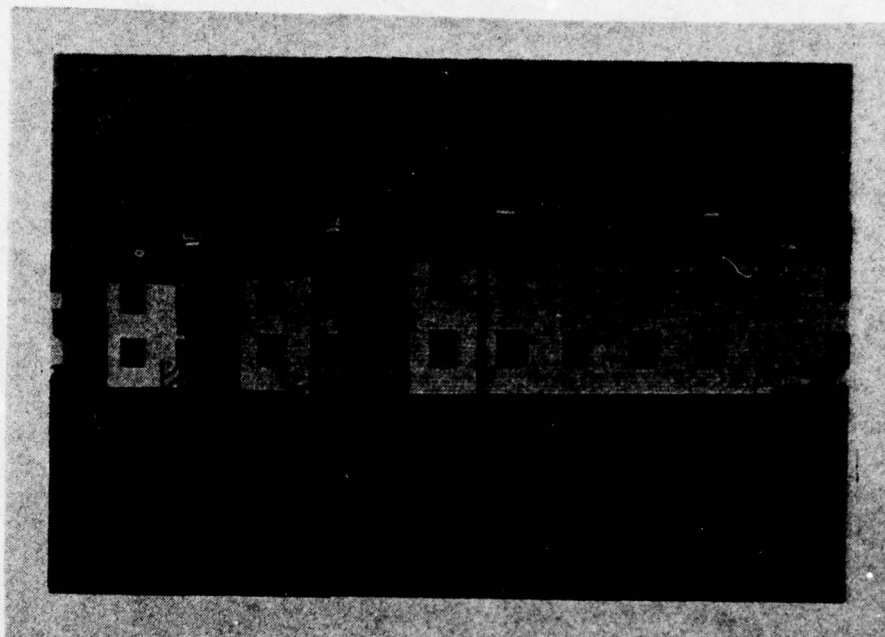
Figure 41. Series 800 Barracks at Fort Devens, Massachusetts. After 1941 the Corps of Engineers assumed control of Army construction and developed the Series 800 design. Fort Carson, Colorado, which was activated after Pearl Harbor, was built entirely with this design. Note the brick chimneys and the different ventilation systems, plus the absence of window canopies.

SOURCE: Photograph by David W. Rhyne.

organized in case of war. Changes in mobility and firepower made it clear that armor would play an important role if war came, but no one had decided how many different battalions would comprise a brigade, or what size a division would be. As a result, the 1938 plans were drawn in battalion blocks with the idea that they could be put together in a division-sized post when organizational decisions were made (Fine and Remington, 1972, 73).

As it turned out, several changes were made in the organization of the Army division, and these changes were reflected in the organization of the World War II camps. However, the basic concept of division-sized mobilization camps remained. Camps were still built in basic rectangular or U-shaped patterns, and there was none of the traumatic shift in size or architecture of the Army post that had occurred in World War I.

The selection of sites for the new posts was again important, because the posts had a major impact upon the present distribution of the Army. Map 22 reveals that the major posts of World War II were scattered across the country, but there was a distinct concentration in the Southeast and a smaller cluster in California. Map 17 (page 85) reveals that all of the major posts created since 1940, and that survived until 1960, were all south of the Mason-Dixon Line. World War II and its aftermath

Map 22.   Mobilization Centers of World War Two.   Almost twice as many posts as in
          World War I were used to train divisions or replacements in World War II.
          Most of the posts trained several different divisions during the course
          of the war.   As in World War I the distribution of posts had a southeasterly
          orientation reflecting climate, training room, orientation toward Europe,
          and possibly politics.

1. Camp Atterbury, Ind.	21. Camp Forrest, Tenn.	41. Camp McCoy, Wisc.
2. Camp Barkeley, Tex.	22. Camp Gordon, Ga.	42. Fort Monmouth, N. J.
3. Camp Beale, Calif.	23. Camp Grant, Ill.	43. Fort Ord, Calif.
4. Camp Beauregard, La.	24. Camp Gruber, Okla.	44. Camp Pickett, Va.
5. Fort Belvoir, Va.	25. Camp A. P. Hill, Va.	45. Camp Pine, N. Y.
6. Fort Benning, Ga.	26. Camp Hood, Tex.	46. Camp Polk, La.
7. Camp Blanding, Fla.	27. Fort Sam Houston, Tex.	47. Camp Roberts, Calif.
8. Fort Bliss, Tex.	28. Camp Howze, Tex.	48. Fort Riley, Kans.
9. Camp Bowie, Tex.	29. Fort Huachuca, Az	49. Camp Robinson, Ark.
10. Fort Bragg, N. C.	30. Camp Indiantown Gap, Pa.	50. Camp Rucker, Ala.
11. Camp Breckenridge, Ky.	31. Camp Irwin, Calif.	51. Camp San Luis Obispo,
12. Camp Campbell, Ky.	32. Fort Jackson, S. C.	Calif.
13. Camp Carson, Colo.	33. Fort Knox, Ky.	52. Camp Shelby, Miss.
14. Camp Chaffee, Ark.	34. Camp Lee, Va.	53. Fort Sill, Okla.
15. Camp Cooke, Calif.	35. Fort Lewis, Wash.	54. Camp Stewart, Ga.
16. Camp Croft, S. C.	36. Camp Livingston, La.	55. Camp Swift, Tex.
17. Fort Custer, Mich.	37. Camp Mackall, N. C.	56. Camp Wolters, Tex.
18. Fort Devens, Mass.	38. Camp Maxey, Tex.	57. Camp Leonard Wood, Mo.
19. Fort Meade, Md.	39. Fort Meade, Md.	
20. Camp Edwards, Mass.	40. Fort McClellan, Ala.	

SOURCES: Lenore Fine and Jesse A. Remington, "The Corps of Engineers:
Construction in the United States," The United States Army in World War Two:
The Technical Services (Washington, D. C.: Office of the Chief of Military
History, U. S. Army, 1972). Scanlan, Army Times Guide to Army Posts, pp.
1-274.

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MOBILIZATION CENTERS OF WORLD WAR TWO

○ Initial Centers for Army and
   National Guard Divisions, 1940

● Other Division and Replacement
   Training Centers

500

Miles
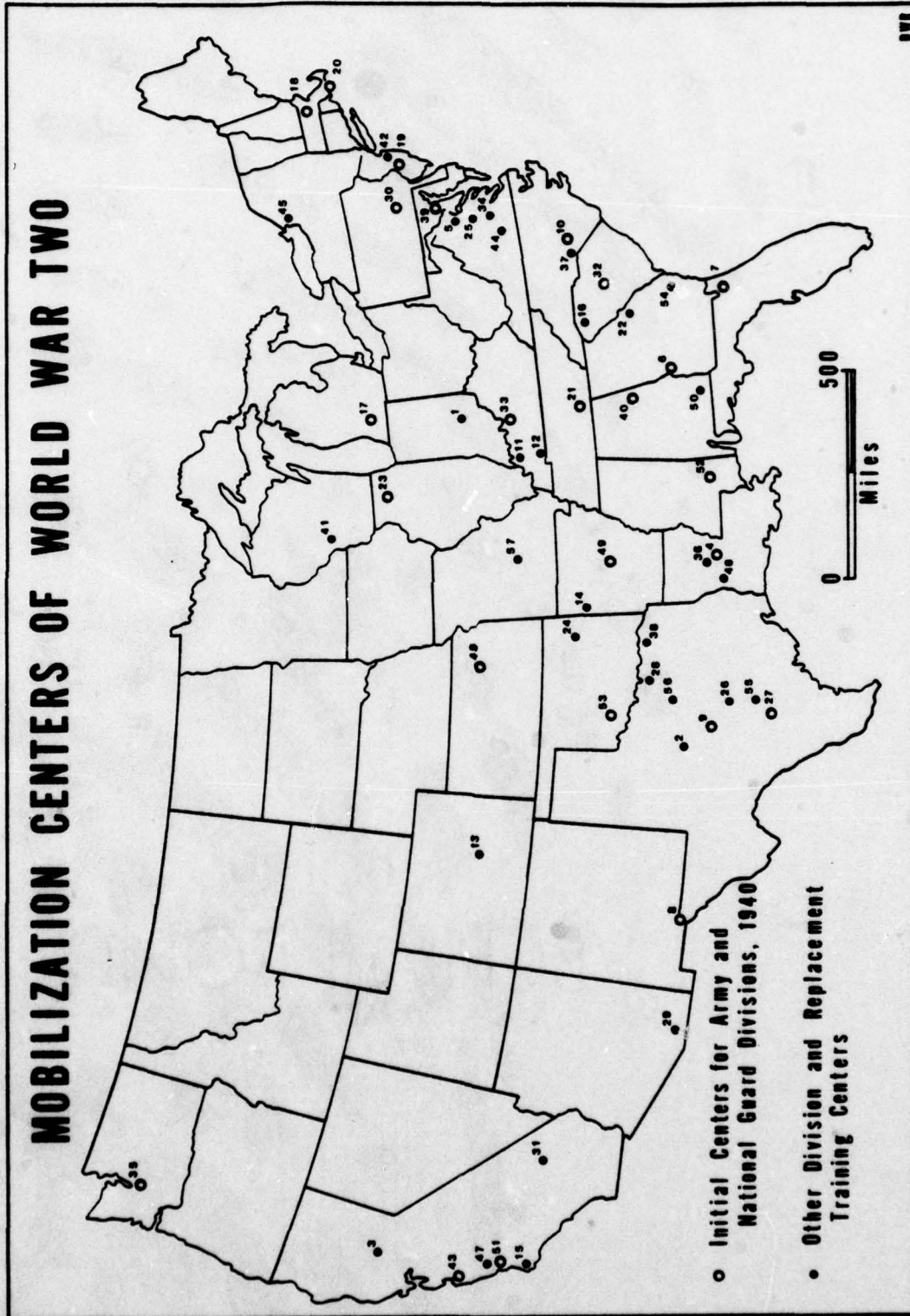
continued the trend, which began after the frontier was closed, toward concentration of Army posts in the South (see maps 12 through 18, 1900-1978).

Site selection for World War II camps was not as clear cut as it had been in World War I. In World War I the selection was controlled by the emergency conditions and the fact that political considerations had been waived in favor of military solutions. This was not entirely the case in World War II. One third of the major posts were built on sites of existing permanent forts or camps that had seen use in World War I. Of the remaining camps, some sites were selected by boards of officers appointed by the War Department, but in many cases the authority was decentralized to the nine corps area commanders (Fine and Remington, 1972, 130-140).

By this time in the nation's development, local communities and political leaders had developed strong notions about the economic impact that a major Army post could have on an area. Competition developed between cities and regions that desired Army posts, and corps commanders were more accessible to local lobbying groups than the War Department. Fine and Remington (1972, 141) contend that most training areas were again selected in the South because of the better climate. The largest concentrations of posts were in the East because of the more dangerous threat from Europe, and because of the decision to defeat Germany first. Political pressures

obviously existed, however, in the selection of many
individual sites, and some corps commanders accepted
sites without properly surveying them first. The failure
to survey some of the sites prior to purchasing or
leasing them resulted in serious construction problems.
Some sites were found to have poor topography or
excessively rocky terrain for construction. Others were
found to exist almost entirely within swamps (Fine and
Remington, 1972, 142-143). Only one site near Leon,
Iowa was rejected by the War Department after an inves-
tigation revealed that there was insufficient water to
support a camp (Fine and Remington, 1972, 207).

Climate, accessibility, and need were military
factors that had to be considered in the selection and
retention of sites for posts. Also, the large amounts
of relatively inexpensive land in the South compared to
the Northeast had to be considered when decisions were
made concerning the opening (and closing after the war)
of major posts. One wonders, however, about the impor-
tance of military considerations in relation to political
and economic factors. Were they important in the distri-
bution of Army posts in the twentieth century United
States?

The Politics and Economics of Army Posts

Congressional Influence?

There is a widely held belief in the United States that the sites for major military posts exist in the home districts and states of powerful members of Congress (past or present). Considering the emphasis on local constituencies in American politics, it is certainly not difficult to understand how this belief developed. According to a recent text in political geography, the "centers for the training of military personnel are political plums for any senator or congressman as they contribute to his political prestige regionally as well as contributing financially to the economy of local areas in the state" (Brunn, 1974, 124). This same text reinforced the idea that military posts are distributed in the South, largely because Southerners have controlled the House Armed Services Committee for the past several decades (Brunn, 1974, 124-125).

Such convictions have some basis in fact, but the ties between particular committees in Congress and the locations of major Army posts have never been adequately demonstrated. Map 18 (page 87) clearly demonstrates a concentration of Army posts in the South, and a review of the Official Congressional Directory shows that Southerners have indeed controlled the major military related committes of Congress in recent decades. These facts alone, however, do not prove a strong relationship

between politics and the distribution of Army posts.

The standing committees that make the major decisions and recommendations concerning the distribution of defense funds and military activities are the Appropriations Committees and the Armed Services Committees in both the Senate and the House of Representatives.[1] The chairmen of these committees are the senior and most powerful members, and they are capable of exerting the most influence on decisions (see appendix 3). It may be hypothesized that if the influence of individual congressmen was a major factor in the distribution of Army posts, concentrations of major posts should be highest in the home districts and states of these powerful committee chairmen. Perhaps surprisingly, this has generally not been the case, particularly in the committees of the House of Representatives.

Maps 23 through 26 show the home districts and states of these chairmen and the distribution of major Army posts from the decade of the 1920's to 1976. No firm relationship was exhibited between Army posts and relevant chairmen in the House of Representatives. In fact, not one major Army post was activated or reactivated in the home district of a congressman, while that congressman served as a chairman of either the House

---

[1] Prior to 1947 military activities were controlled by Military Affairs Committees (Congressional Directory).

Map 23. Army Posts and Congressional Influence, 1921-1930? In the first
decade after World War I, both wings of Congress were controlled
by Republicans. Chairmen for the Armed Services and Appropriations
Committees came from northern districts and states. Most of the
Army posts that were activated during the decade were also in the
northern areas of the country. No new Army posts were activated in
districts represented by chairmen of committees in the House of
Representatives, and only one chairman came from a district where
a major Army post (Fort Riley, Kansas) existed. Two posts were
activated or reactivated in Pennsylvania during the same decade
that Senator David A. Reed served as chairman of the Military
Affairs Committee, but it was unclear whether either post was
actually opened during his tenure (1928-32).

SOURCES: U. S. War Department, Army List and Directory,
January 1930, pp. 36-42. U. S. Congress, Official Congressional
Directory (Washington, D. C.: U. S. Government Printing Office,
published annually).

ARMY POSTS AND CONGRESSIONAL INFLUENCE?
1921-1930

- **Posts, 1930**

Constituencies of Chairmen of Appropriations and Military Affairs Committees

Senate

House

NOTE: Posts appearing since 1920 are numbered to correspond with Appendixes 1 and 2.

0   500   Miles
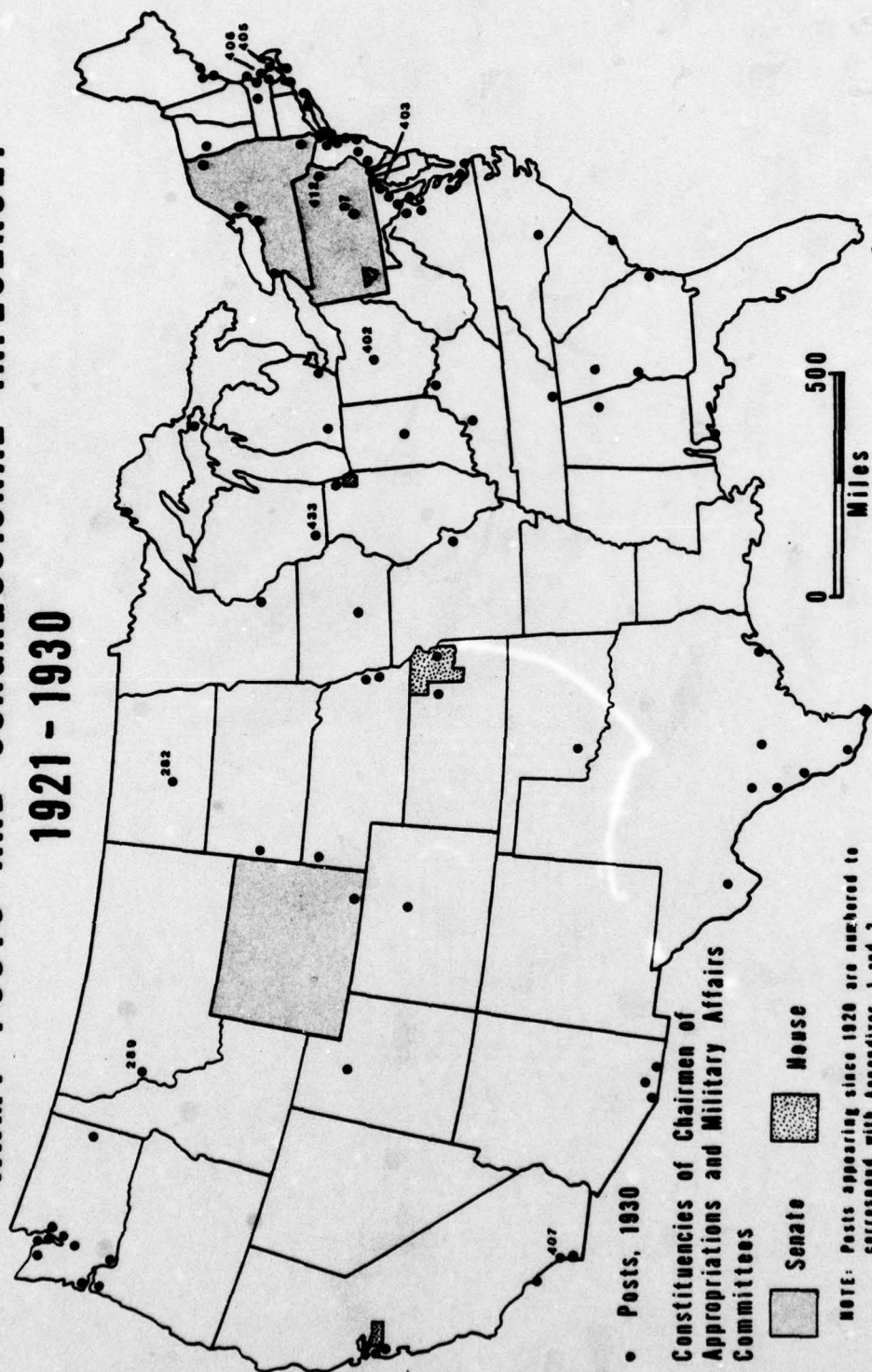
Map 24. Army Posts and Congressional Influence, 1931-1940? In 1932 the
Democrats gained sweeping victories across the nation. Beginning
in 1933 every chairman of the Appropriations Committees or the
Military Affairs Committees came from a district or state south
of the Mason-Dixon Line. Likewise, most Army posts activated during
the decade were in the South. Again, as in the previous decade,
none of the activated or reactivated posts were in districts
represented by chairmen in the House of Representatives. Camp
Bonneville, Washington was activated in 1938, well after Senator
Wesley L. Jones relinquished chairmanship of the Senate Appropriations
Committee in 1932.

SOURCES: U. S. War Department, Army List and Directory, October
1940, pp. 29-39. U. S. Congress, Official Congressional Directory,
1931-40.

ARMY POSTS AND CONGRESSIONAL INFLUENCE?

1931-1940

500

0

Miles

• Posts, 1940

Constituencies of Chairmen of
Appropriations and Military Affairs
Committees

Senate

House

NOTE: Posts appearing since 1930 are numbered to
correspond with Appendices 1 and 2.
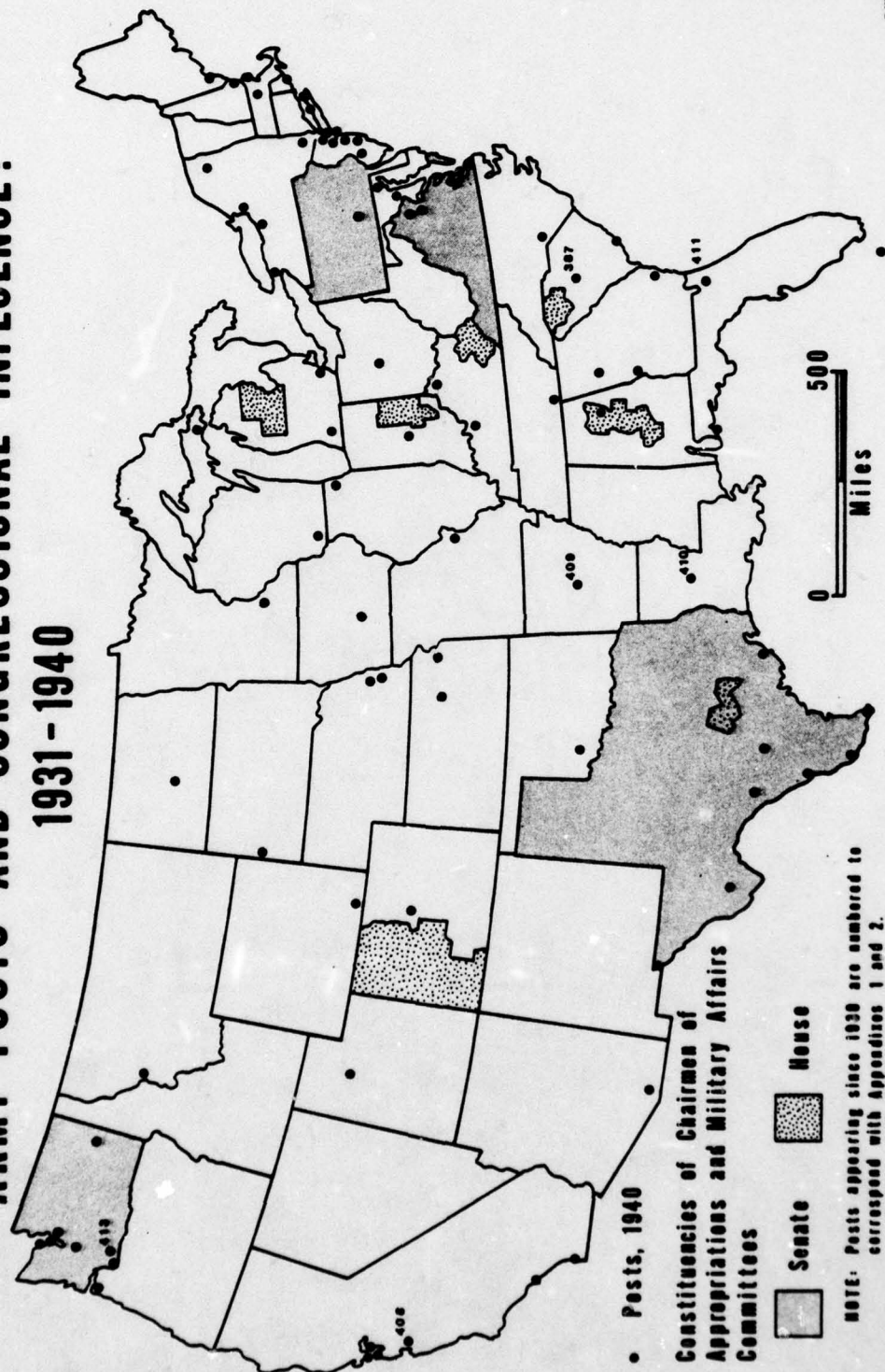
Map 25. Army Posts and Congressional Influence, 1941-1960? With the exception of four years during this period (1947-48 and 1953-54) Democrats again controlled Congress and the committee chairmanships. All of the Democratic chairmen came from the South or the Southwest. The new Army posts shown on the map were initially activated during World War II, and again none of them were activated in districts represented by chairmen of the House Armed Services or Appropriations Committees. The relationship between Army posts and Congressional chairmen appears somewhat stronger at the Senate level, but only five of the new posts shown (in Maryland, Virginia, and Texas) were activated during or within one year after a senator from the state served as chairman of one of the committees.

SOURCES: Scanlan, Army Times Guide to Army Posts, pp. 1-274.
U. S. Congress, Official Congressional Directory, 1941-60.

ARMY POSTS AND CONGRESSIONAL INFLUENCE?

1941–1960

• Posts, 1960

Constituencies of Chairmen of
Appropriations and Armed Services
Committees

▨ Senate

▨ House

NOTE: Posts appearing since 1940 are numbered to
correspond with Appendixes 1 and 2.

500

Miles
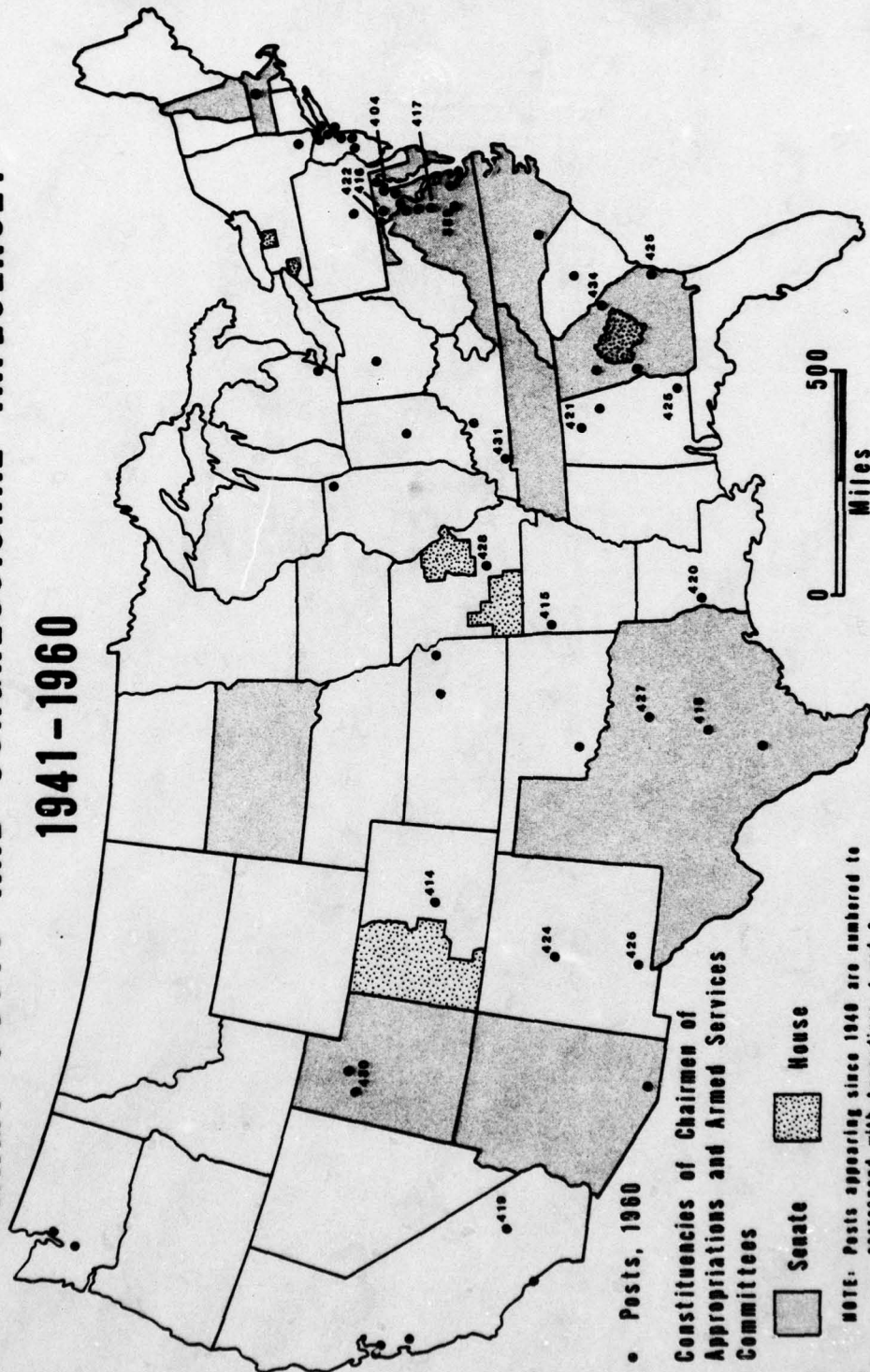
Map 26. Army Posts and Congressional Influence, 1961-1976? Since 1960 Congress has been controlled completely by the Democrats. Almost all of the chairmen of the Appropriations and Armed Services Committees have come from states and districts with Southern heritages. No posts were activated or reactivated during the period in states or districts represented by chairmen of related Congressional committees. Of all the states shown, only Georgia appears to exhibit any relationship between the number of major Army posts and the chairmanship of one of the committees. Senator Richard B. Russell of Georgia headed the Senate Armed Services Committee for a total of fifteen years between 1951 and 1968.

SOURCES: Greenwald, The Times Magazine Guide to Military Installations in the U. S., pp. 5-18. U. S. Congress, Official Congressional Directory, 1961-1976.

ARMY POSTS AND CONGRESSIONAL INFLUENCE?
1961-1976

• Posts, 1975

Constituencies of Chairmen of
Appropriations and Armed Services
Committees

Senate

House

NOTE: Posts appearing since 1960 are numbered to
correspond with Appendixes 1 and 2.

Miles
0   500
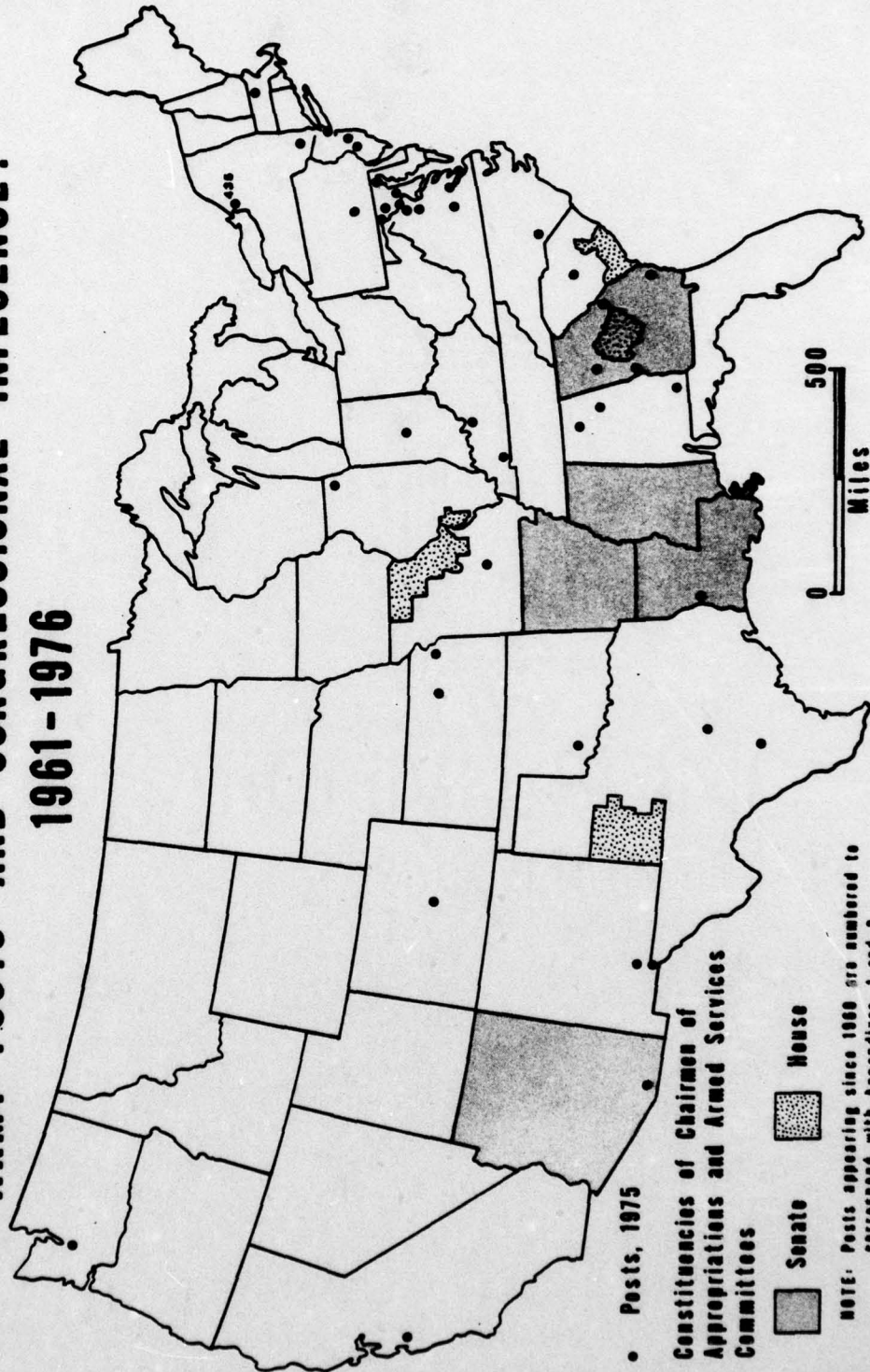
Armed Services Committee or the House Appropriations
Committee. Very few chairmen even came from districts
with major Army posts.

At the Senate level the association between chairmen
of the committees and Army posts appears somewhat
stronger. Maps 23 through 26 reveal that a total of
eleven posts were activated or reactivated in states
that had senators serving as committee chairmen during
the same general period. Five of these were opened
during or within one year after a senator from the state
served as chairman of the Appropriations or Armed Services
Committee.[1] Even this is not a very significant number,
however, when one considers that nearly forty newly
activated or reactivated posts are shown on the maps for
the same period.

Perhaps there is at least one major reason for
the conviction that the locations of major Army posts
are connected with influential political leaders. Most
senators and congressmen who have served very long terms
(six years or more) as chairmen of the Appropriations
or Armed Services Committees have come from states that
now have larger numbers of major Army posts than other

---

[1]Fort Hood and Camp Wolters, Texas were activated
while Senator Morris Sheppard was chairman of the
Military Affairs Committee from 1933-42. Fort Lee and
Camp A. P. Hill, Virginia opened while Senator Carter
Glass was chairman of the Appropriations Committee from
1933-46. Fort Ritchie, Maryland reactivated one year
after Senator Millard E. Tydings lost his chairmanship
of the Armed Services Committee in 1950.

states. Since 1920 Arizona, Arkansas, Georgia,
Illinois, Kentucky, Mississippi, Missouri, New York,
Virginia, and Wyoming have each had at least one chair-
man who served more than six years on the Armed Services
or Appropriations Committees of Congress. To the
standing committees already mentioned should be added
two important joint committees. The Joint Committee
on Reduction of Federal Expenditures was chaired by
Virginia's Senator Harry F. Byrd from 1943-66.
Congressman George H. Mahon of Texas assumed control
of the committee until its apparent termination in 1974.
From 1955 to 1975 the Joint Committee on Defense
Production was controlled alternately by Senator
A. Willis Robertson of Virginia, Congressman Wright
Patman of Texas, and Senator John Sparkman of Alabama.[1]
The only interruption in that control was a two-year
term (1959-60) by Congressman Paul Brown of Georgia.
By virtue of their tenure on such committees, these
long-term senators and congressmen must be considered
as the most powerful politicians in terms of their
abilities to shape the locations of major Army posts and
defense expenditures. At first glance, the facts seem
to support the idea that they have done just that.

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[1]As of 1975 Senator Sparkman had served only
four years as chairman of this committee.

Of the forty-five major posts in existence in 1978, sixteen of them (thirty-six percent) were in seven states that had at least one long-term chairman between 1920 and 1975. The three states of Virginia, Georgia, and Texas had twelve of these posts (twenty-seven percent). They also had at least two chairmen who served for more than six years on one of the committees mentioned above. Only Mississippi and Wyoming lacked major Army posts to go with their long-term chairmen. On the other hand, the majority of major posts existed in states that never had long-term chairmen. New Jersey, Maryland, Alabama, Kansas, and California each had more than one major post. Finally, of all major Army posts in 1978, only three (Fort Lee, Virginia; Fort Hood, Texas; and Fort Campbell, Kentucky) were actually activated or reactivated in states that had long-term chairmen serving at the time on the committees in question.[1]

In sum, there does not appear to be a very strong relationship between the activation and reactivation of major Army posts and the chairmen of committees in Congress that could influence such decisions. Further inquiry is needed to determine what influence was used to retain some of the posts in particular states or districts

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[1]Fort Campbell, Kentucky was activated while Congressman Andrew Jackson May served as chairman of the House Military Affairs Committee from 1939-46. The post was not established in his district.

that had chairmen. The argument that locations of
Army posts are tied to "the key House Armed Services
Committee" (Brunn, 1974, 123) appears particularly weak
in light of the evidence presented here. At least the
chairmen of that committee have had little luck getting
Army posts in their own districts. Perhaps they have
had more influence with the other military services.
Brunn (1974, 124) cited one example where Congressman
L. Mendel Rivers of South Carolina had an Air Force base,
Coast Guard station, Navy base and shipyard, Marine
barracks, an Army depot, and a veterans' hospital in
his Charleston district. Congressman Rivers served as
chairman of the House Armed Services Committee from
1965 through 1970. Perhaps other members of the
committees have been able to obtain or retain major
Army posts, even though the chairmen have not been able
to do so.

Perhaps the suspicions about military posts and
politics are based on much broader principles, such as
the distribution of total defense expenditures, partic-
ularly defense contracts. In 1973 the North Carolina
geographer Clyde E. Browning looked into the matter of
government spending and its impact on the landscape.
Although Browning found that federal outlays (based on
1971 data) had "relatively little impact on the process
of economic development and its geographic distribution"
(Browning, 1973, 53), it was determined that defense

outlays had greater local impacts than those of other
agencies (Browning, 1973, 58). Not very surprisingly,
data from Browning's study revealed that the distribution
of per capita defense outlays also had very strong
southern and western orientations. Some of the
highest ranking states were those that have had chair-
men who served long terms on committees related to
appropriations and military affairs.

The Economic Impact of Army Posts

One basis for the long held prejudices about the
connections between military posts and politicians has
been the economic value associated with major posts.

> The spillover effects of military installations
> are often substantial even though they are
> primarily restricted to the immediate area
> surrounding the base. Many of these bases are
> foci of "wealth" in otherwise poor rural areas
> (Brunn, 1974, 124).

The assumption has generally been that military
posts are economic and, hence, political jewels.
Arguments in recent years against base closings have
focused on the economic ruin that such closings would
bring to localities and regions. In reality, too little
research has been done to draw any firm conclusions
about the economic impact of military posts in the
United States, particularly the major Army posts of the
South. The only study of an Army post found by this
author was of Fort Devens, Massachusetts in 1965, and
that study produced conflicting evidence.

The study of Fort Devens found that forty percent
of the employment in the surrounding community of Ayer
was directly related to the post.[1] The town enjoyed a
per capita retail trade volume that was twice as large
as the Massachusetts average. The presence of Fort
Devens qualified Ayer as a "Federally Impacted Area"
(Terner, 1965, 28), and substantial federal funds were
available to help run the town's school system. Without
Fort Devens, Ayer would not have received its heavy
federal support, and closing the post would have cost
the town several jobs. Concern over possible closure
in 1930 was enough to prompt the local representative
to the state legislature to start a vigorous campaign
to keep the post open. That campaign was one factor in
the decision to retain Fort Devens as a permanent post
(Terner, 1965, 30).

Despite Ayer's apparent reliance on Fort Deven's
and the political campaign to keep the post, Terner's
findings were otherwise discouraging. Even Ayer's
reliance on the post might be considered a negative
factor when viewed with other evidence. Fort Devens
did little to stimulate economic or population growth
for Ayer. Most industrial and supply business generated

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[1]See Ian D. Terner, "The Economic Impact of a
Military Base: A Case Study of Fort Devens and Ayer,
Massachusetts" (Master's Thesis, Harvard Graduate
School of Design, 1965).

by the post was contracted at regional and national
levels, and local firms were unable to compete.
Manufacturing and railroads, which had led Ayer's
employment for years, actually declined after the post
was activated. The large railroad yard (one of the
main reasons for selecting the site for the post) was
out of use by the time of Terner's study. Fire destroyed
the town's major industry (a tannery) in 1961, and it
was never rebuilt. The town's population increased from
2,797 in 1910 to only 3,522 by 1960, and twenty-five
percent of the 1960 population consisted of active
duty personnel stationed at Fort Devens (Terner, 1965,
7-9). Terner calculated the multiplier effect of Fort
Devens during this period to be a very low 1.2 (Terner,
1965, 111).

The large post at Fort Devens obviously did little
to stimulate growth in the local area. Even so, the town
apparently became addicted to the increased consumer
money and federal assistance generated by the post.
Today, Ayer lies approximately five miles from Interstate
495 around Boston, one-half hour from the city by auto-
mobile. Other towns in the area have apparently bene-
fitted from their locations near Boston, but Ayer retains
the appearance of a depressed area. Very few retailers
have expanded their stores, and housing has seen little
improvement. Terner (1965, 110) attributed these facts,
in part, to uneasiness about the stability of the post.

It might be argued that conditions in New England are different than those in the South. New England was already well developed by the time Fort Devens was established during World War I, and the more rural South might be expected to benefit more from a major post. Certainly, attitudes towards the military have generally been more positive in the South than in the Northeast. Even considering the financial advantages of joining Ayer in a regional school system, citizens of other towns in the area refused the proposal with such comments as: "We don't want out children mixing with kids from that 'camp town' . . ." (quoted in Terner, 1965, 25).

Evidence is too scanty to draw comparisons between Ayer and other military towns. Further research will be needed to determine the economic and political importance of large Army posts in other regions of the country. Since Army posts extend contracts primarily at national and regional levels, it may be significant that no chairmen of military related committees in the House of Representatives have obtained major posts for their districts. Perhaps such posts are more valuable at regional levels than at local levels. Perhaps such politicians hope to generate regional economic benefits without the supposed high crime rates and racial problems of major Army posts in the immediate district. These are just a few areas for inquiry. In the final analysis,

the links between the locations of Army posts and
economic or political factors remain unproven. Only
general conclusions can be made. Army posts are
distributed with a southern bias, along with defense
expenditures and political control of the major
committees in Congress.

Appearance of Army Posts Since World War II

The Cold War Army Post

The years immediately following World War II were
similar in some respects to the years following every
war in the history of the United States. The size of
the Army decreased, as the nation rapidly demobilized,
but as in previous demobilizations the Army never reached
its prewar size. The United States emerged from the war
as the most powerful and richest nation on earth, however,
and this fact prevented any practical considerations of
returning to isolation. The Korean War confirmed the
notion in many minds that the United States would have
to play a more active role than it had ever played in
international politics. The position of the nation as
leader of the non-communist world was sealed, and as
former President Hoover proclaimed in 1950:

> . . . We Americans alone, with sea and air
> power, can so control the Atlantic and Pacific
> oceans that there can be no possible invasion of
> the Western Hemisphere by Communist armies (quoted
> in Adler, vol. 17, 1968, 47).

Isolationism was permanently finished for the United States, and the large Army post became a fixed item on the American cultural scene. The conflicts between the nation's role as world leader and its citizens' traditional dislike of military power were reflected in the Army and its posts. A large standing Army was necessary to support the nation's position, and in radical departure from American tradition, it had to be recognized as a permanent element. Throughout the 1950's and 1960's many of the temporary structures of World War II were replaced by more permanent brick buildings. Some of the effort was directed toward new barracks for the soldiers, but most of the transformation occurred in administrative and service areas near the centers of the posts. New headquarters and office buildings, movie theaters, and post exchanges (PX's) were created in the area equivalent to a city's central business district (see figures 42 and 43). This _main_ _post_ area was located adjacent to the parade field, that center of attraction common to all Army posts and the area most visible to the public. The centers of many posts were rebuilt in a program analogous to downtown renewal projects (except more successful), and the main post actually became more modern and substantial than the peripheral areas.

The retention of most World War II mobilization barracks was perhaps a reflection of America's continued
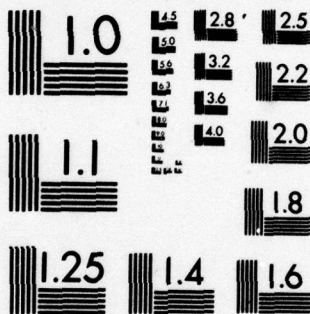
MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Figure 42. Modern Movie Theater at Fort Devens,
Massachusetts. Movie theaters with
modern conveniences were only one part
of the renewal that occurred at the
centers of Army posts during the 1950's
and 1960's. In addition to improving
the appearance of Army posts, these
changes provided better services to
soldiers and dependents.

SOURCE: Photograph by David W.
Rhyne.

Figure 43. Barracks of the Cold War Army Post.
These barracks at Fort Devens are one
example of the simple and efficient-
looking architecture that was used
on Army posts in the two decades
following World War II. Those shown
here were built facing one another in
a large battalion quadrangle with an
assembly area in the center. The layout
might remind one of the early frontier
forts, when companies and battalions
were the largest units to occupy a post.

SOURCE: Photograph by David W.
Rhyne.
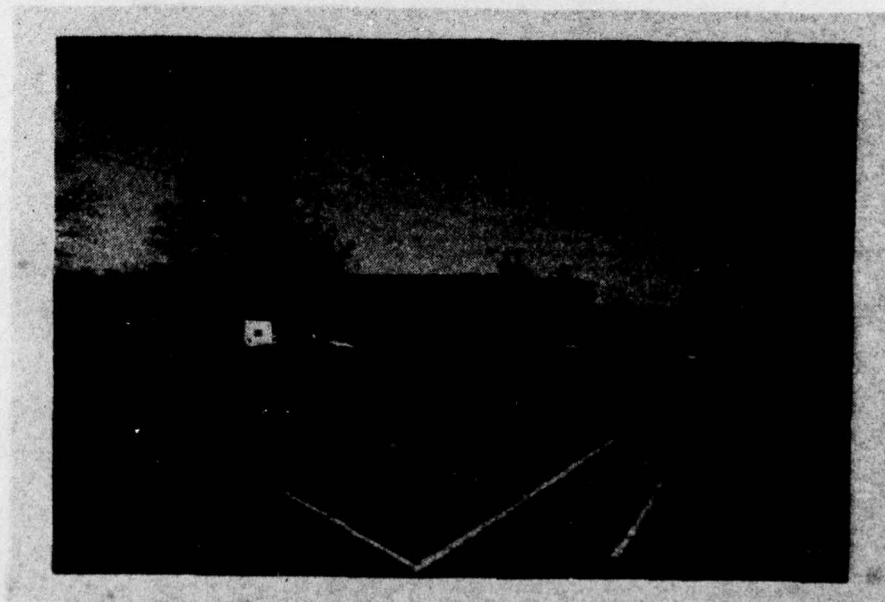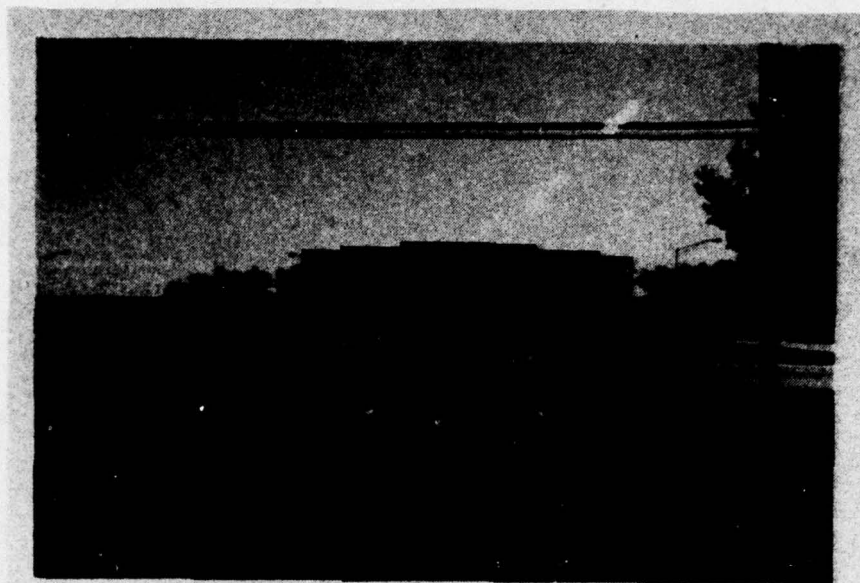
reluctance to accept a large standing Army and spend the
money to pay for it. Notwithstanding the fact that they
were temporary structures, large numbers of them could
still be found in 1978 in varying degrees of use and
repair. As late as 1972 approximately half of the units
at Fort Carson, Colorado were still occupying wooden
structures of World War II vintage. New housing for
married soldiers was built in peripheral areas, but there
was never enough of it. More and more families moved to
outlying communities to buy or rent housing. For disci-
plinary (and certainly economic) reasons, the lower
ranking, unmarried, enlisted soldier had to remain on
the post, and most of them lived in deteriorating
barracks. There was never enough money to rebuild
entire Army posts or provide decent housing for every-
one, and as was usually the case in civilian society as
well, the lowest people on the social and official ladder
drew the shortest straws for living standards. The
demoralized and desertion-prone Army of the Vietnam
era became a familiar story to many Americans, and the
conditions of life in the barracks did not help.

The Modern Volunteer Army Post

The longest period of conscription in the history
of the United States ended in the early 1970's, and the
nation returned to a volunteer Army for the first time
in more than thirty years. It was a significant event

for the Army and the Army post, particularly as they related to American society. Although a volunteer force had been traditional in the nation before World War II, most Americans in 1970 were accustomed to a conscripted Army. To them a volunteer Army was a new experience. Adding to the uniqueness of the modern volunteer Army was the fact that it was several magnitudes larger than any previous volunteer Army, more than five times larger than the Army of the 1920's and 1930's.

When the draft ended, the Army no longer had an endless pool from which to draw its soldiers automatically. It now had to attract a large number of people from a traditionally unmilitary society. It had to attract men and women who might have preferred to remain in civilian life to pursue the American dream of financial success and social stability.

Many programs were adopted to attract soldiers. They included increased pay, promises of vocational training, opportunities for education, and massive advertising campaigns. The Army post had to change as well. Much as in the 1928 building program, the Army had to work toward the ideals of a "Happy Garrison" (Nurse, 1928, 15). It had to make an effort to provide the soldier with the comforts of living and the opportunities that he might expect to find in middle class America. In the terminology of General William C. Westmoreland in 1971, the Army had to "take rapid and

positive actions to enhance service attractiveness and remove unnecessary irritants to the troops" (quoted in Brown, 1971).

The message from General Westmoreland was clear. If the volunteer Army was to succeed, it had to conform more closely to the cultural norms of American society. It was impossible, however, for the Army to function on the same standards as the rest of American society. Some of the innovations on the posts, such as beer dispensers in the barracks, did not last long; however, many of the innovations did last, and efforts continue today to bring the Army closer to the lifestyles of American civilians.

Fort Carson, Colorado was one of the first posts to undergo the transformation. As of May 1971 more than eight million dollars had been spent to bring the post in line with the concepts of the volunteer Army. Barracks were partitioned for soldier privacy, and the old open-bay barracks were ended. New furniture was purchased, Saturday morning inspections were curtailed, and eight-hour work days became common. According to one reporter covering the early changes at Fort Carson, the new policies had created the greatest upheaval in military traditions and geography in the history of the nation, including war (Brown, 1971). Such efforts were but a drop in the bucket, however, when it came to the physical alterations at Fort Carson. Throughout the middle 1970's a massive construction effort was undertaken to replace

the old World War II barracks with modern dormitory
style buildings (see figure 44).

There were leaders in both military and civilian
circles who argued (and continue to argue) that the
volunteer Army would revert to its clannish, isolated
attitudes of previous years (Brown, 1971). In an
obvious reaction to the Vietnam conflict, the old
specter of a powerful military establishment that would
threaten the existence of the Republic had once again
risen its head. But according to many military and
civilian leaders who organized the scheme, the whole
purpose of the volunteer Army policies was to make the
Army more compatible with civilian society and bring
them closer together (Hughes, 1971). The continuing
physical alterations of modern Army posts would seem
to bear out this last argument.

The modern Army posts of America are largely opened
to visitors. Many of them have museums and other points
of interest that encourage visitors. They have been
that way through much of the nation's history, but
few people have taken advantage of the opportunities.
Many visitors might be astonished to find that several
features of the average Army post look very much like
the average middle class American community. There are
not the crowded downtown retail districts as in most
towns, but the main post areas serve similar functions
and occupy similar positions of importance. Functional
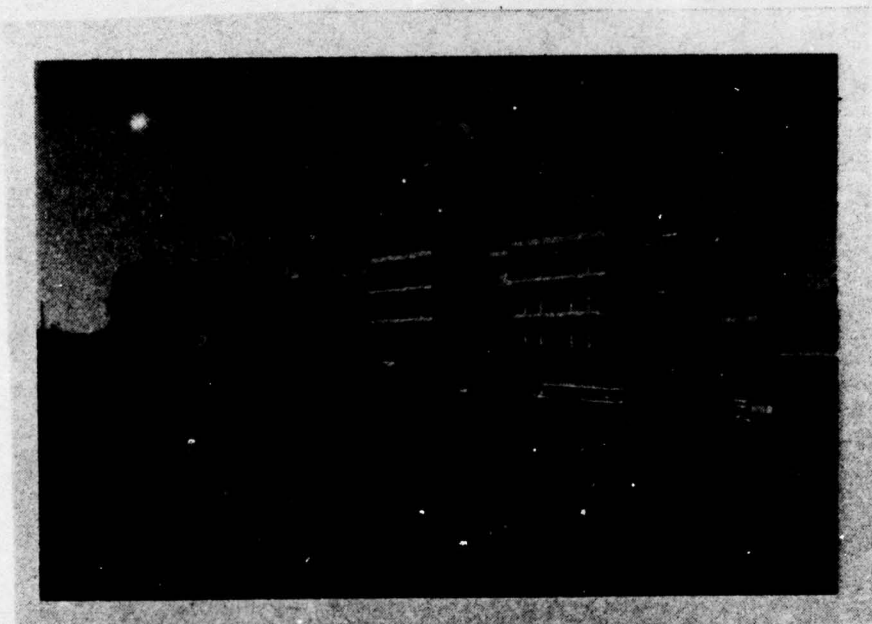
Figure 44.   Modern Barracks of the New Army.
These barracks at Fort Devens are
similar to those built at Fort
Carson and other major posts
throughout the country during
the 1970's. They represent an
effort similar to that of 1928,
when the Army tried to erase
morale problems exacerbated by
living in dilapidated wooden
barracks.

SOURCE: Photograph by David W.
Rhyne.

areas for administration, services, housing, etc. are
distinctly visible, as are functional areas in American
cities. Housing areas reflect the distinct hierarchy
of Army rank, but so too do different communities in
American cities and towns reflect different levels of
social and economic status.

The average soldier on Army posts lives in much
the same way and experiences many of the same expectations
as the average civilian citizen. To be sure, the soldier
lives under more stringent rules of social behavior,
and the evidence of military discipline is everywhere
on the posts. Uniformity has long been a byword in the
Army, and it is perhaps this feature that is most
strking about the appearance of Army posts. Building
designs and locations are similar from one post to the
next. Houses in a particular residential area are
exactly alike in most cases. Symbols of individualism,
such as expedient additions to a house, are not as
evident on Army posts as in civilian communities. Army
posts have transient populations, and there is little
motive or opportunity to express one's individualism by
making major alterations to a house that is owned by the
government.

Army posts present a centralized and controlled
atmosphere to visitors. Perhaps that is why few people
visit them and fewer scholars study them. Yet, there
can be no doubt that what one sees on any Army post

in the United States is distinctly American. It is
part and parcel of American culture, and perhaps
growing moreso each decade. If it were not for the
telltale identical houses along each street in the
residential sectors, or the names and ranks of each
occupant posted beside each door, one might have
difficulty distinguishing these residential areas
from any other developments in any middle class American
community (figures 45 through 48).

Figure 45.   Colonel's Row at Fort Devens,
             Massachusetts. The aristocracy of
             many Army posts (particularly the
             ones built before World War II) are
             housed in structures similar to
             these at Fort Devens. The ones
             shown here are located near the
             main post area and the officers'
             club, and they face a beautiful
             parade field.

                  SOURCE: Photograph by David W.
             Rhyne.

Figure 46.   Housing for Junior Officers.
             Somewhat further down the social
             and official scale, lieutenants and
             captains might be found in houses
             similar to these (also at Fort Devens).
             Although not as elegant as the houses
             in figure 45, they are quite comfortable,
             if not adequate in number.

                  SOURCE: Photograph by David W.
             Rhyne.
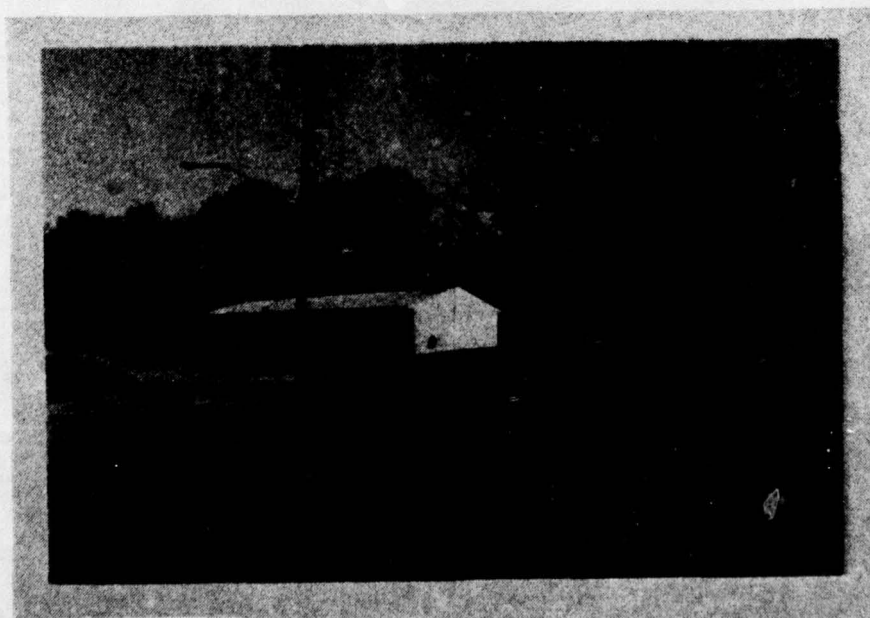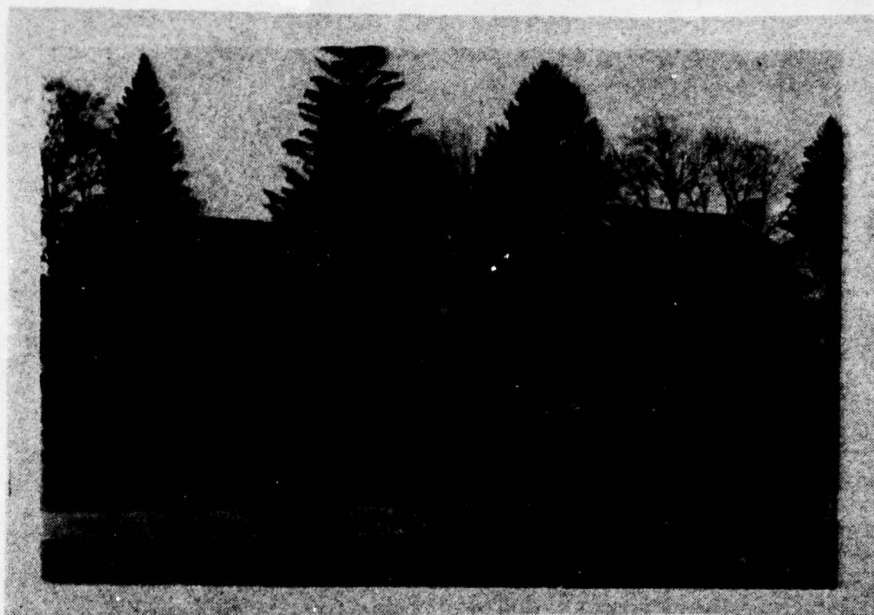
Figure 47.   Multiple Family Housing at Fort Devens.
Although multiple family houses are
sometimes occupied by officers, these
at Fort Devens are occupied by junior
noncommissioned officers. They
represent a further step down the
social order from commissioned officers.
Unmarried junior enlisted personnel
are at the bottom of the order, and
they usually live in barracks. Consider
the similarities to social orders in
civilian society.

SOURCE: Photograph by David W.
Rhyne.

Figure 48.   Post Exchange on a Modern Army Post.
The PX is the center of the Army post's
downtown retail district. Near it one
will find the commissary, garden shop,
laundromat, bowling alley, theater,
service station, and other service-
oriented facilities. The post head-
quarters and the parade field are also
usually within sight from here. PX's of
this same design are found at most Army
posts in the United States.

SOURCE: Photograph by David W.
Rhyne.
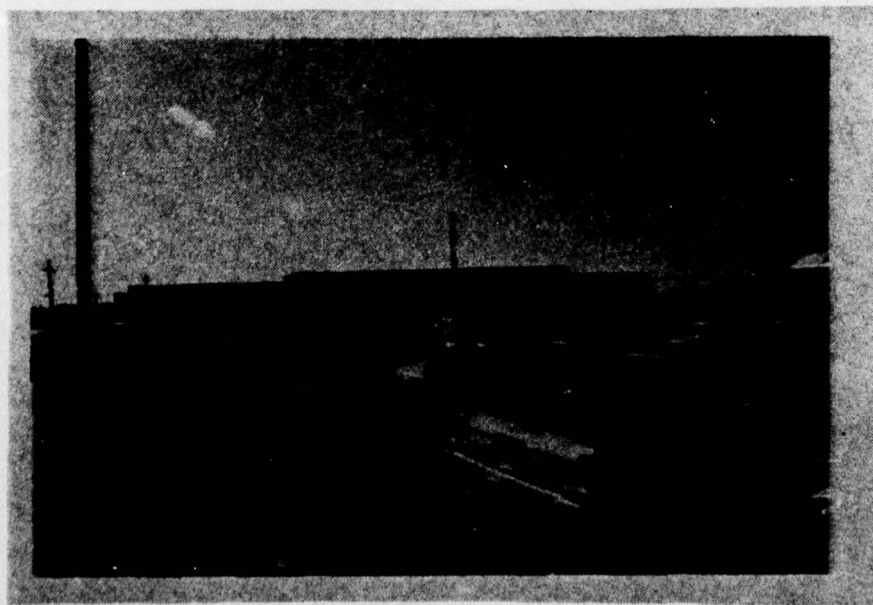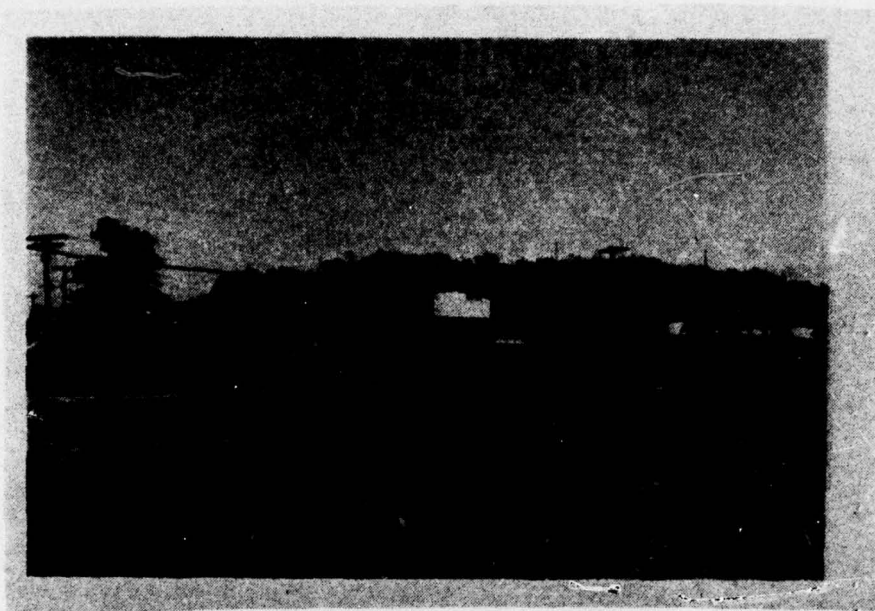
CHAPTER V

REFLECTIONS AND PROJECTIONS

Reflections

One of the underlying premises for this paper has
been that armies reflect the societies from which they
come (Preston, 1956, 13). The information presented in
the preceding chapters should leave little doubt that
the premise is true. One could and should extend the
argument to say that armies not only reflect their
societies, but that they are distinct and unique culture
groups within their societies. If one wishes to study
the culture of the United States, one should also look
at the Army. To ignore the Army in any study of general
American culture is an omission tantamount to ignoring
the Pilgrims.

There are many unique aspects of this culture group
known as the United States Army. It is a melting pot
within a melting pot, bringing together people from
different culture groups and social positions to execute
the will of the nation. At the same time it is an aris-
tocratic society with sharply defined social castes. It
has kept alive some of the oldest traditions from our
European heritage. More than any other single culture
group in the nation, the Army has been heavily involved

in every period of development, expansion, and turmoil since the Revolution. With few possible exceptions (such as the Pennsylvania Dutch, American Indians, and Black Americans) the United States Army has been perhaps the most easily distinguishable and cohesive culture group to experience the entire spectrum of American growth.

The simple fact of the Army's existence, no matter how many people wish it did not have to exist, dictates that the Army should not be ignored in studies of American geography. Yet, too many geographers have done exactly that. The Army has influenced the American landscape too much to be neglected as it has been by geographers. Historians and political scientists have not had an aversion to studying armies. Why should geographers have such an aversion?

If it can be accepted that the Army reflects American society, Army posts can certainly be accepted as measures of that reflection. It has been shown that early coastal forts of the United States reflected the nation's futile attempt to sever itself from Europe. No matter how independent and individualistic Americans wished to become, there was no escaping the fact that much of their behavior and many of their ideas were dictated by European traditions. This was particularly true in the populated East, where the stone and masonry forts experienced their greatest achievements in America.

In Chapter III the frontier fort was followed as it spread westward across the continent. While the frontier continued to move, many of the changes in Army posts supported some of Frederick Jackson Turner's ideas about American democracy and individualism on the edge of civilization. At the same time there were indications that tendencies toward the opposite extremes were occurring. Frontiersmen may have been hard individualists in some respects, but many of them depended on the Army and the security provided by Army forts and camps. Those Army posts were symbols of the federal government's control in the area, and they did little to enhance individualism and democracy on the frontier. In fact, the frontier was probably closer to coming under martial law than any area outside of the Reconstruction South. Even though few plans existed as guides for constructing Army posts in the wilderness, the posts that were built continued to reflect the strict discipline inherent to military organizations. When conditions stabilized for about a decade on the permanent Indian frontier, the Army and the nation showed their traditional European ties by designing and building forts similar to those of Vauban's Europe and colonial America.

When the frontier disappeared and the twentieth century emerged, Army posts reflected the Progressive movement and America's reluctant move toward international politics. The mobilization camps of the Spanish-American

War set the early foundations for the modern Army posts that acted as stations for training troops and deploying them to overseas battlefields. World War I introduced mass production to the Army and reintroduced mass armies to the nation.[1] The large posts that are so familiar today were born in America's first war in Europe. Despite attempts to return to isolation after the war and forget the Army, the building program of 1928 was one indication that this was not possible. The "Happy Garrison" (Nurse, 1928, 15) reflected the optimistic mood of the nation in the years immediately before the Great Depression, and it may have reflected an attempt by the Army to remove itself from the isolation it had endured through much of the nation's history.

World War II revived World War I ideas about mass production Army posts, and the original ideas were improved and expanded. The large Army post became a permanent facet of American life, as the Cold War settled into a stalemate. Americans were still reluctant to pay the price for international power, and much of the Army in this country continued to live in temporary wooden barracks into the 1970's.

The trauma of Vietnam and reaction to that war

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[1]The Civil War was the only previous experience in American history, when the Army operated on a large scale with division, corps, and field armies.

found the Army at perhaps its lowest morale and most
isolated position since the anti-military sentiments
that immediately followed World War I. The modern
volunteer Army of the 1970's and the resulting changes
in Army posts have reflected the latest attempts to
reduce the bitterness of Vietnam and once again bring
the Army back into the mainstream of American society.
These attempts appear curiously similar to those of
1928. Whether they will succeed or not has yet to be
determined.

Projections

The very nature and broad scope of this paper
have left many questions unanswered. Most of these
questions should probably be directed at the modern
Army and the modern Army post in American society.
Although the past is always interesting in its own
right, the present and the future receive far too
little emphasis in scholarly studies. Army forts and
camps of the eighteenth and nineteenth centuries have
received a great deal of attention from historians
(and at least one architect). After all, history is
what historians do best. However, geographers should
not be concerned so much with the past. The trend in
geography in recent years has been toward studying
contemporary social problems and predicting future
patterns. Studies of that nature should also be possible

with Army posts.

Far too little evidence has been presented thus far to support some of the common notions about the economic and political effects of major installations. Browning (1973) is the only geographer that this author is aware of who has tried in recent years to collect data that even touched on the issue of economic impacts of military bases on the landscape. His general conclusions about the impacts of federal outlays, or even defense expenditures, were not very encouraging to those who believe federal money is reshaping the entire nation. He did not even address the more narrow topic of military bases, except to present data on defense pay at the state level.

What kind of an impact do the large military bases of the country have? Obviously, they bring some prosperity to local merchants, real estate investors, and home builders. It it simply impossible to have many soldiers with money to spend in an area and not have some impact on the local economy. All major military installations also hire substantial numbers of civilian laborers, technicians, and office workers, so they produce jobs for local communities in addition to providing soldiers with spending money. Certainly, the federal assistance that military communities receive for their school systems and other services are important. Some small communities (such as Ayer, Massachusetts)

apparently depend on Army posts for practically their entire livelihood. Small wonder that local legislators should be interested in keeping active military bases in their districts.

It was surprising to find, however, that the chairmen of the House Appropriations Committee and House Armed Services Committee had never established a major Army post in any of their districts since at least 1920. Very few chairmen even came from districts with existing major posts. These politicians have certainly not been any less interested in pleasing their constituencies than any other politicans. How did they ever get reelected after failing to deliver such "political plums" (Brunn, 1974, 124) to their districts? The answer to the puzzle may be a simple conflict-of-interest rule or a gentleman's agreement in the committees (not very likely), or it may be something much more enlightening about the value of Army bases in comparison to other sources of defense money. It may be that these "foci of 'wealth' in otherwise poor rural areas" (Brunn, 1974, 124) are less valuable to members of Congress than previously considered, providing few economic benefits in their districts other than the immediate money and jobs for the local communities. Perhaps the images of instability, high crime rates, and racial tensions that many military towns portray are damaging to the Congressional district when it comes

time to attract more stable and productive industries.
Since the military extends contracts at national and
regional levels anyway, it would not necessarily be
advantageous for defense related industries to locate
near military towns, particularly considering the
transportation capabilities available today. Also,
there are no inherent guarantees that military towns
offer adequate supplies of labor or adequate market
areas for industry. It may well be that the chairmen
of these House committees know how to get more valuable
defense money in the form of contracts that will
stimulate the economy much better than a large troop
garrison. In the same context Senate chairmen may be
more willing to compete for major Army posts in the
state, simply because state and regional industries
would be large enough to compete for the business
generated by the posts. Whatever the answers may be,
there is certainly room for inquiry.

An even more interesting topic than economic and
political impacts of Army posts may be the continuing
saga of military and civilian relationships in American
society. The debate on the modern volunteer Army is
certainly not finished by any means, and many people
continue to doubt that a large volunteer Army can
survive in a traditionally anti-military American
society. Do the improvements on Army posts in recent

years and the massive advertising and public relations
campaigns signify that the Army is succeeding or failing
in its efforts to improve its standing in the civilian
community? Have the physical improvements and relaxed
rules on Army posts done anything to attract better or
more qualified people into the Army? It may be viewed
in a better light by those who are in the Army, but is
it perceived any differently by those who are outside
the Army? Some arguments contend that it is not. Is
Army life so distasteful that no amount of improvements
and benefits will create a general willingness among
Americans to serve as long as opportunities exist else-
where? Will volunteers continue to come from the
underprivileged sectors of society, as they did through-
out the frontier and the Great Depression? What will
happen to the volunteer Army and the modern Army post
as the nation tightens its budget, and less money
becomes available to spend on social programs and
military benefits? Will more privileged people be
driven out and more underprivileged people be driven into
the Army? Will the Army become the same isolated and
poverty stricken element it was in the last decades of
the nineteenth century? As long as the United States
remains a leader in the world, this last possibility is
not likely to occur. As of this writing, the Army and
the government are committed to make the volunteer Army
work. If the time ever comes when attitudes toward the

military change in America, or the Army finds that it
cannot change those attitudes, then some adjustments
will have to be made. Any changes in the Army will be
reflections of attitudes in civilian society. They in
turn will be reflected in the appearances of Army posts.

Ever since its establishment in the earliest days
of the Republic, the Army has tended toward defensiveness
and isolationism in its relationships with the rest of
American society. The frictions between the Army and
civilian society today are not really a question of
danger that the Army will usurp power in the nation and
destroy the Constitution. That may have been an issue
with the Founding Fathers, but a more relevant issue
today is regimentation within the Army versus individual-
ism within civilian society. Such qualities must
coexist, and there will probably always be some friction.
Another major source of friction has always been the
need for taxes to support the Army. Too many people
view the Army as a large welfare organization for
people who cannot get jobs in "productive" fields.
There will be some truth in that notion as long as the
notion exists, but there will also be some defensiveness
on the part of professional soldiers who believe they
are performing an important duty. The Army may always
be doomed to relative isolation from the rest of American
society, and one way to study that tendency is through
the Army post. It is possible for Army posts to reflect

American society without the Army moving toward a closer relationship with the rest of society. The simple facts that Army posts exist in the United States, are populated by Americans, and are built by Americans (usually civilian contractors) are enough to guarantee that they will always reflect American culture. It also follows, however, that the closer the relationship is between military and civilian societies, the more accurate that reflection will be. After all, cultural artifacts are representations of ideas, and Army posts _are_ cultural artifacts.

APPENDIX 1

NUMERICAL LISTING OF ARMY POSTS
SHOWN ON MAPS 1 THROUGH 18

Number	Name, State (dates of existence)
1.	Fort Pitt, Pennsylvania (1777-1815)
2.	Fort McIntosh, Pennsylvania (1778-1791)
3.	Fort Steuben, Ohio (1786-1796)
4.	Fort Harmar, Ohio (1785-1790)
5.	Fort Telfair, Georgia (1790-1795)
6.	Fort Finney, Kentucky (1786-1793)
7.	Fort Washington, Ohio (1789-1804)
8.	West Point, New York (1778-present)
9.	Knoxville, Tennessee (1793-1807)
10.	Tellico Blockhouse, Tennessee (1794-1806)
11.	Southwest Point, Tennessee (1794-1806)
12.	Fort Wilkinson, Georgia (1796-1806)
13.	Fort James, Georgia (1797-1802)
14.	Fort Wayne, Indiana (1794-1819)
15.	Fort Knox, Indiana (1787-1816)
16.	Fort Massac, Illinois (1794-1814)
17.	Fort Pickering, Tennessee (1797-1810)
18.	Fort Adams, Mississippi (1798-1810)
19.	Fort Stephens, Alabama (1799-1808)
20.	Fort Independence/Fort Winthrop, Massachusetts (1798-1897)
21.	Fort Adams, Rhode Island (1798-1950)
22.	Fort Mifflin, Pennsylvania (1798-1866)
23.	Fort McHenry, Maryland (1794-1912)
24.	Fort Nelson, Virginia (1794-1824)
25.	Fort Norfolk, Virginia (1794-1824)
26.	Fort Johnson, North Carolina (1794-1881)
27.	Fort Ontario, New York (1796-1946)
28.	Fort Niagara, New York (1796-1962)
29.	Fort Bell Canton, Tennessee (1797-1800)
*30.	Fort Preble, Maine (1808-1925)
31.	Fort Constitution, New Hampshire (1808-1868, 1895-1946)

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*Estimated date of closing (± five years)

**Estimated dates of opening and closing (± five years)

32. Fort St. Philip, Louisiana (1803-1871)
33. Fort Mackinac, Michigan (1796-1894)
34. Fort Dearborn, Illinois (1803-1836)
35. Newport Barracks, Kentucky (1803-1894)
36. Fort Madison, Iowa (1803-1813)
37. Fort Osage, Missouri (1808-1819)
38. Fort Belle Fontaine, Missouri (1805-1826)
39. Fort Hampton, Alabama (1794-1814)
40. Fort Stoddart, Alabama (1794-1814)
41. Nachitoches, Louisiana (1804-1819)
42. Attakapas, Louisiana (1804-1819)
43. Baton Rouge Barracks, Louisiana (1810-1879)
*44. Jackson Barracks, Louisiana (1803-1925)
*45. Fort Columbus/Fort Jay, New York (1806-1970)
46. Fort Sullivan, Maine (1808-1873)
*47. Fort Delaware, Delaware (1814-1885)
48. Fort Severn, Maryland (1814-1845)
49. Fort Washington, Maryland (1815-1872, 1905-1935)
50. Plattsburg Barracks, New York (1812-1946)
51. Greenbush, New York (1816-1820)
52. Madison Barracks, New York (1815-1945)
53. Fort Gratiot, Michigan (1814-1879)
54. Fort Howard, Wisconsin (1816-1852)
55. Fort Snelling, Minnesota (1819-1947)
56. Fort Crawford, Wisconsin (1816-1856)
57. Fort Armstrong, Iowa (1816-1836)
58. Fort Edwards, Illinois (1816-1824)
59. Cantonment Martin, Kansas (1818-1820)
60. Fort Smith, Arkansas (1817-1871)
61. Fort Charlotte, Alabama (1813-1820)
62. Fort Mitchell, Alabama (1813-1837)
63. Fort Scott, Georgia (1816-1821)
64. Fort Pike, Louisiana (1816-1871)
*65. Fort Barrancas, Florida (1820-1946)
66. Fort Gadsden, Florida (1818-1821)
*67. Fort Trumbull, Connecticut (1812-1915)
68. Fort Lafayette, New York (1822-1868)
69. Oglethorpe Barracks, Georgia (1821-1851)
*70. Fort Marion, Florida (1821-1885)
71. Fort King, Florida (1827-1843)
72. Hancock Barracks, Maine (1828-1845)
73. Fort Brady, Michigan (1822-1944)
74. Fort Winnebago, Wisconsin (1828-1845)
75. Fort Leavenworth, Kansas (1827-present)
76. Jefferson Barracks, Missouri (1826-1946)
77. Fort Gibson, Oklahoma (1824-1890)
78. Fort Towson, Oklahoma (1824-1854)
79. Fort Jessup, Louisiana (1822-1846)
80. Camp Atkinson, Louisiana (1830-1832)
81. Fort Macomb, Louisiana (1827-1867)
82. Fort Clinch, Florida (1824-1834)
83. Fort Jackson, Louisiana (1822-1871)

84.   Fort Wool, Virginia (1818-1953)
*85. Fort Moultrie, South Carolina (1826-1885, 1905-1945)
*86. Fort Sumter, South Carolina (1826-1885, 1905-1945)
87.   Fort Brooke, Florida (1824-1882)
88.   Fort Monroe, Virginia (1823-present)
89.   Fort Macon, North Carolina (1834-1876)
90.   Fort Pierce, Florida (1838-1842)
91.   Fort Dallas, Florida (1838-1858)
*92. Fort Taylor/Key West Barracks, Florida (1831-1946)
93.   Fort Pickens, Florida (1834-1867)
94.   Fort Morgan, Florida (1834-1868)
95.   Fort Wayne, Oklahoma (1838-1842)
96.   Fort Atkinson, Iowa (1840-1849)
97.   Fort Hamilton, New York (1831-present)
*98. Fort Clinch, Florida (1847-1885)
99.   Fort Meade, Florida (1849-1857)
100. Fort Myers, Florida (1850-1858)
101. Fort Wilkins, Michigan (1844-1870)
102. Fort Ripley, Minnesota (1849-1877)
103. Fort Dodge, Iowa (1850-1853)
104. Fort Scott, Kansas (1840-1873)
105. Camp Arbuckle, Oklahoma (1851-1870)
106. Fort Washita, Oklahoma (1842-1861)
107. Fort Worth, Texas (1849-1853)
108. Fort Graham, Texas (1849-1853)
109. Fort Gates, Texas (1849-1852)
110. Fort Croghan, Texas (1849-1853)
111. Austin, Texas (1845-1875)
112. Fort Martin Scott, Texas (1848-1866)
113. Fort Lincoln, Texas (1849-1852)
114. Fort Sam Houston, Texas (1845-present)
115. Fort Inge, Texas (1849-1869)
116. Fort Duncan, Texas (1849-1883)
*117. Fort McIntosh, Texas (1849-1915)
118. Fort Merrill, Texas (1850-1885)
119. Corpus Christi, Texas (1845-1881)
120. Fort Polk, Texas (1846-1850)
121. Fort Brown, Texas (1846-1944)
*122. Fort Ringgold, Texas (1848-1946)
123. Socorro, New Mexico (1849-1851)
124. Albuquerque, New Mexico (1847-1861)
125. Las Vegas, New Mexico (1848-1851)
126. Abiquiu, New Mexico (1849-1851)
127. Fort Marcy, New Mexico (1846-1894)
128. Fort Bliss, Texas (1848-present)
129. San Elizario, Texas (1849-1851)
130. Fort Kearny, Nebraska (1848-1871)
131. Fort Laramie, Wyoming (1849-1890)
132. Cantonment Loring, Idaho (1849-1850)

133.   Fort Dalles, Oregon (1850-1867)
*134.   Vancouver Barracks, Washington (1849-1946)
135.   Camp Astoria, Oregon (1850-1851)
136.   Fort Steilacoom, Washington (1849-1868)
137.   Fort Far West, California (1849-1852)
138.   Sonoma, California (1847-1851)
*139.   Benicia Barracks, California (1849-1905)
140.   Monterey, California (1847-1865)
141.   Rancho del Chino, California (1850-1852)
142.   San Luis Rey, California (1847-1852)
*143.   San Diego Barracks, California (1849-1895)
144.   Fort Yuma, California (1850-1882)
145.   Carlisle Barracks, Pennsylvania (1842-1879,
        1925-present)
146.   Camp Wood, Texas (1857-1861)
147.   Camp Hudson, Texas (1857-1868)
148.   Fort Mason, Texas (1851-1869)
149.   Camp Colorado, Texas (1856-1861)
150.   Camp Cooper, Texas (1856-1861)
151.   Fort Belknap, Texas (1851-1867)
152.   Fort Arbuckle, Oklahoma (1851-1870)
153.   Fort Larned, Kansas (1859-1878)
154.   Fort Riley, Kansas (1853-present)
155.   Fort Randall, South Dakota (1858-1892)
156.   Fort Ridgley, Minnesota (1853-1867)
157.   Fort Abercrombie, North Dakota (1858-1877)
158.   Fort Wayne, Michigan (1841-1965)
159.   Fort Stockton, Texas (1858-1886)
160.   Fort Davis, Texas (1854-1891)
161.   Fort Fillmore, New Mexico (1851-1862)
162.   Fort Craig, New Mexico (1854-1884)
163.   Fort Stanton, New Mexico (1855-1896)
164.   Fort McLane, New Mexico (1860-1861)
165.   Fort Union, New Mexico (1851-1891)
166.   Cantonment Burgwin, New Mexico (1852-1860)
167.   Fort Garland, Colorado (1858-1883)
168.   Fort Lyon, Colorado (1860-1889)
169.   Fort Bridger, Wyoming (1858-1890)
170.   Fort Crittendon, Utah (1858-1861)
*171.   Boise Barracks, Idaho (1853-1915)
*172.   Fort Walla Walla, Washington, (1856-1915)
173.   Fort Cascades, Washington (1855-1861)
174.   Fort Bellingham, Washington (1856-1860)
175.   Fort Chehalis, Washington (1860-1861)
176.   Fort Yamhill, Oregon (1856-1866)
177.   Fort Haskins, Oregon (1856-1865)
178.   Fort Umqua, Oregon (1856-1862)
179.   Fort Gaston, California (1858-1892)
180.   Fort Crook, California (1857-1866)
181.   Fort Humboldt, California (1853-1867)
*182.   Alcatraz Island, California (1869-1895)
183.   Presidio of San Francisco/Fort Point,
        California (1847-present)

184.   Fort Tejon, California (1854-1864)
185.   Fort Breckenridge, Arizona (1860-1861)
186.   Fort Defiance, Arizona (1851-1861)
187.   Fort Mojave, Arizona (1859-1890)
188.   Fort Churchill, Nevada (1860-1869)
189.   Camp Verde, Texas (1856-1869)
190.   Fort Pulaski, Georgia (1862-1873)
191.   Fort Jefferson, Florida (1861-1878)
*192.   Fort Schuyler, New York (1861-1935)
193.   Fort McPherson, Georgia (1865-present)
194.   Fort McKavett, Texas (1852-1883)
195.   Fort Lancaster, Texas (1855-1861)
196.   Fort Concho, Texas (1867-1889)
197.   Fort Chadbourne, Texas (1852-1867)
198.   Fort Griffin, Texas (1867-1881)
199.   Fort Richardson, Texas (186701878)
200.   Fort Sill, Oklahoma (1869-present)
201.   Fort Supply, Oklahoma (1868-1894)
202.   Fort Dodge, Kansas (1865-1882)
203.   Fort Marker, Kansas (1864-1873)
204.   Fort Omaha, Nebraska (1868-1947)
205.   Fort McPherson, Nebraska (1863-1880)
206.   North Platte Station, Nebraska (1867-1877)
207.   Fort Sedgewick, Colorado (1864-1871)
208.   Fort Sidney, Nebraska (1867-1894)
209.   Whetstone Agency, South Dakota (1870-1872)
210.   Fort Hale, South Dakota (1870-1874)
211.   Fort Thompson, South Dakota (1864-1871)
212.   Fort Sully, South Dakota (1863-1894)
213.   Fort Bennett, South Dakota (1870-1891)
214.   Grand River Agency, South Dakota (1870-1875)
215.   Fort Sisseton, South Dakota (1864-1889)
216.   Fort Ransom, North Dakota (1867-1872)
217.   Fort Rice, North Dakota (1864-1878)
218.   Fort Totten, North Dakota (1867-1890)
219.   Fort Pembina, North Dakota (1870-1895)
220.   Fort Stevenson, North Dakota (1870-1895)
221.   Fort Buford, North Dakota (1866-1895)
222.   Camp Cooke, Montana (1866-1870)
223.   Fort Benton, Montana (1869-1881)
224.   Fort Shaw, Montana (1867-1891)
225.   Fort Logan, Montana (1869-1880)
226.   Fort Ellis, Montana (1867-1886)
*227.   Fort Washakie, Wyoming (1869-1915)
228.   Fort Stanbaugh, Wyoming (1870-1878)
229.   Fort Fetterman, Wyoming (1867-1882)
230.   Fort Fred Steele, Wyoming (1868-1886)
231.   Fort Sanders, Wyoming (1866-1882)
*232.   Fort D. A. Russell, Wyoming (1867-1925)
233.   Fort Hays, Kansas (1865-1889)
234.   Fort Reynolds, Colorado (1867-1872)
235.   Fort Quitman, Texas (1868-1877)

236.	Fort Selden, New Mexico (1865-1890)
237.	Fort Cummings, New Mexico (1863-1886)
238.	Fort McRae, New Mexico (1863-1876)
239.	Fort Bascom, New Mexico (1863-1870)
240.	Fort Bowie, Arizona (1862-1894)
*241.	Fort Grant, Arizona (1862-1895)
242.	Camp Crittenden, Arizona (1868-1878)
243.	Fort Lowell, Arizona (1862-1891)
244.	Fort Goodwin, Arizona (1864-1871)
245.	Camp Pinal, Arizona (1870-1871)
*246.	Fort Apache, Arizona (1870-1925)
247.	Fort McKowell, Arizona (1865-1891)
248.	Camp Reno, Arizona (1868-1870)
249.	Fort Verde, Arizona (1866-1891)
250.	Camp Hualpai, Arizona (1869-1873)
*251.	Whipple Barracks, Arizona (1863-1915)
252.	Camp Date Creek, Arizona (1867-1873)
253.	Fort Rawlins, Utah (1870-1871)
*254.	Fort Douglas, Utah (1862-1965)
255.	Fort Halleck, Nevada (1867-1886)
256.	Camp Winfield Scott, Nevada (1866-1871)
257.	Fort McDermit, Nevada (1865-1889)
258.	Camp Three Forks Owyhee, Idaho (1866-1871)
259.	Fort Hall, Idaho (1870-1883)
260.	Camp Lapwai, Idaho (1862-1885)
261.	Fort Colville, Washington (1869-1882)
262.	Fort San Juan Island, Washington (1869-1874)
*263.	Fort Canby, Washington (1864-1895)
264.	Fort Stevens, Oregon (1865-1884)
265.	Fort Harney, Oregon (1867-1880)
266.	Camp Warner, Oregon (1866-1874)
267.	Fort Klamath, Oregon (1883-1889)
268.	Fort Bidwell, California (1865-1893)
269.	Camp Wright, California (1862-1875)
270.	Fort Bragg, California (1857-1864)
271.	Camp Independence, California (1862-1877)
272.	Drum Barracks, California (1862-1871)
273.	Fort Myer, Virginia (1862-present)
*274.	Fort Porter, New York (1863-1925)
275.	Mount Vernon Barracks, Alabama (1873-1894)
*276.	Fort Reno, Oklahoma (1874-1905)
277.	Fort Elliot, Texas (1875-1890)
278.	Camp Pena Colorado, Texas (1880-1893)
279.	Fort Hartsuff, Nebraska (1874-1881)
*280.	Fort Meade, South Dakota (1878-1946)
*281.	Fort Yates, North Dakota (1874-1905)
282.	Fort Abraham Lincoln, North Dakota (1872-1891)
283.	Cantonment Badlands, North Dakota (1879-1883)
*284.	Fort Keogh, Montana (1876-1905)
285.	Camp Porter, Montana (1880-1881)
286.	Camp Poplar River, Montana (1880-1893)

*287.	Fort Custer, Montana (1877-1895)
*288.	Fort Assinniboine, Montana (1879-1915)
*289.	Fort Missoula, Montana (1877-1946)
*290.	Fort Sherman, Idaho (1878-1895)
291.	Camp Howard, Idaho (1877-1881)
292.	Fort Maginnis, Montana (1880-1890)
*293.	Fort Spokane, Washington (1880-1895)
*294.	Fort Townsend, Washington (1856-1895)
295.	Fort Cameron, Utah (1872-1883)
*296.	Fort Logan, Colorado (1887-1946)
297.	Fort Lewis, Colorado (1878-1891)
298.	Fort Crawford, Colorado (1880-1890)
299.	Fort Thomas, Arizona (1876-1890)
300.	Fort Huachuca, Arizona (1877-present)
301.	Fort Hancock, Texas (1881-1895)
*302.	Fort Bayard, New Mexico (1866-1895)
*303.	Fort Clark, Texas (1852-1946)
304.	Camp Del Rio, Texas (1876-1891)
*305.	Fort Niobrara, Nebraska (1880-1905)
306.	Camp Sheridan, Nebraska (1874-1881)
*307.	Fort Robinson, Nebraska (1874-1946)
308.	Columbus Barracks, Ohio (1875-1922)
309.	Fort Wingate, New Mexico (1868-1910)
310.	Little Rock Barracks, Arkansas (1873-1890)
*311.	Fort Yellowstone, Wyoming (1886-1915)
312.	Fort Sheridan, Illinois (1887-present)
*313.	Fort Duchesne, Utah (1886-1915)
**314.	Fort Crook, Nebraska (1900-1945)
**315.	Fort MacKenxie, Wyoming (1900-1915)
316.	Fort Thomas, Kentucky (1887-1946)
317.	Presidio of Monterey, California (1903-present)
*318.	Fort Oglethorpe, Tennessee (1903-1946)
**319.	Fort Andrews, Massachusetts (1905-1846)
*320.	Fort Baker, California (1897-1947)
321.	Fort Banks, Massachusetts (1894-1950)
*322.	Fort Barry, California (1908-1946)
*323.	Fort Mason, California (1882-1965)
*324.	Fort Miley, California (1900-1946)
325.	Fort Casey, Washington (1905-1950)
**326.	Fort Columbia, Washington (1905-1945)
*327.	Fort Dade, Florida (1898-1925)
*328.	Fort Des Moines, Iowa (1910-1946)
**329.	Fort De Soto, Florida (1905-1946)
**330.	Fort Du Pont, Delaware (1905-1946)
331.	Fort Flagler, Washington (1899-1953)
**332.	Fort Fremont, South Carolina (1905-1915)
**333.	Fort George Wright, Washington (1905-1946)
*334.	Fort Hancock, New Jersey (1895-1970)
**335.	Fort Howard, Maryland (1905-1935)
*336.	Fort Hunt, Virginia (1910-1946)
337.	Fort Lawton, Washington (1900-1941)

*338.   Fort Logan H. Roots, Arkansas (1905-1915)
**339.   Fort McKinley, Maine (1905-1946)
**340.   Fort Morgan, Alabama (1905-1946)
**341.   Fort Mott, New Jersey (1905-1945)
342.   Fort Rodman, Massachusetts (1865-1950)
**343.   Fort Revere, Massachusetts (1905-1947)
**344.   Fort Rosecrans, California (1905-1946)
**345.   Fort Screvens, Georgia (1905-1946)
**346.   Fort Strong, Massachusetts (1905-1946)
*347.   Fort Terry, New York (1899-1946)
*348.   Fort Totten/Willett's Point, New York
           (1862-1970)
*349.   Fort Wadsworth, New York (1865-1970)
350.   Fort Ward, Washington (1905-1935)
*351.   Fort Warren, Massachusetts (1837-1946)
**352.   Fort William Henry Harrison, Montana (1905-
           1915)
**353.   Fort Williams, Maine (1905-1946)
354.   Fort Worden, Washington (1898-1953)
*355.   Fort Ethan Allen, Vermont (1892-1946)
356.   Fort Benjamin Harrison, Indiana (1906-present)
**357.   Fort Funston, California (1915-1946)
358.   Fort MacArthur, California (1914-   )
*359.   Camp Kearny, California (1917-1925)
*360.   Camp Beacon, California (1917-1925)
*361.   Yuma, Arizona (1917-1925)
**362.   Nogales, Arizona (1917-1935)
**363.   Douglas, Arizona (1917-1935)
*364.   Camp Shannon, New Mexico (1917-1925)
*365.   Camp Furlong, New Mexico (1917-1925)
*366.   Camp Marfa/Fort D. A. Russell, Texas
           (1917-1945)
*367.   Camp Del Rio, Texas (1917-1925)
*368.   Camp Eagle Pass, Texas (1917-1925)
*369.   Camp Stanley, Texas (1917-1945)
*370.   Fort Travis, Texas (1917-1945)
*371.   Camp Logan, Texas (1917-1925)
372.   Fort Crockett, Texas (1915-1954)
373.   Camp Funston, Kansas (1917-1922)
374.   Camp Dodge, Iowa (1917-1922)
*375.   Camp Pike, Arkansas (1917-1925)
376.   Camp Grant, Illinois (1917-1946)
377.   Fort Custer, Michigan (1917-1953)
*378.   Camp Sherman, Ohio (1917-1925)
379.   Fort Knox, Kentucky (1917-present)
380.   Camp Zachary Taylor, Kentucky (1918-1922)
381.   Fort McClellan, Alabama (1917-present)
382.   Camp Shelby, Mississippi (1917-1922,
           1939-1946)
*383.   Fort Gaines, Alabama (1917-1925)
384.   Fort Benning, Georgia (1918-present)
385.   Camp Gordon, Georgia (1917-1922)

*386.   Camp Joseph E. Johnston, Florida (1917-1925)
387.   Fort Jackson, South Carolina (1917-present)
388.   Fort Bragg, North Carolina (1918-present)
389.   Fort Lee, Virginia (1917-1922, 1940-present)
390.   Fort Eustis, Virginia (1918-present)
*391.   Fort Story, Virginia (1917-1970)
392.   Fort Belvoir, Virginia (1912-present)
393.   Fort Meade, Maryland (1917-present)
394.   Fort Dix, New Jersey (1917-present)
*395.   Camp Upton, New York (1917-1925)
*396.   Fort H. G. Wright, New York (1898-1946)
397.   Fort Devens, Massachusetts (1917-present)
**398.   Fort Levett, Maine (1905-1946)
*399.   Fort Baldwin, Maine (1917-1925)
400.   Fort Monmouth, New Jersey (1917-present)
401.   Fort Lewis, Washington (1917-present)
402.   Fort Hayes, Ohio (1922-1965)
**403.   Fort Hoyle, Maryland (1925-1935)
404.   Fort Holabird, Maryland (1917-present)
*405.   Fort Standish, Massachusetts (1900-1946)
**406.   Fort Ruckman, Massachusetts (1925-1946)
**407.   Fort Pio Pico, California (1925-1935)
408.   Fort Ord, California (1933-present)
*409.   Camp Joseph T. Robinson, Arkansas (1940-1946)
410.   Camp Beauregard, Louisiana (1917-1919, 1940-1946)
*411.   Camp Blanding, Florida (1940-1946)
**412.   Camp Tobyanna, Pennsylvania (1925-1939)
413.   Camp Bonneville, Washington (1838-1946)
414.   Fort Carson, Colorado (1942-present)
415.   Fort Chaffee, Arkansas (1941-   )
416.   Fort Detrick, Maryland (1943-present)
417.   Camp A. P. Hill, Virginia (1941-   )
418.   Fort Hood, Texas (1942-present)
419.   Fort Irwin, California (1940-   )
420.   Fort Polk, Louisiana (1942-present)
421.   Redstone Arsenal, Alabama (1941-present)
422.   Fort Ritchie, Maryland (1941-1945, 1951-present)
423.   Fort Rucker, Alabama (1942-present)
*424.   Sandia Base, New Mexico (1942-1970)
425.   Fort Stewart, Georgia (1940-present)
426.   White Sands Missile Range, New Mexico (1945-present)
*427.   Camp Wolters, Texas (1941-1945, 1956-1970)
428.   Fort Leonard Wood, Missouri (1941-present)
429.   Abedeen Proving Ground, Maryland (1918-present)
430.   Dugway Proving Ground, Utah (1942-   )
431.   Fort Campbell, Kentucky (1942-present)
432.   Fort Wood, New York (1814-1935)
433.   Camp McCoy, Wisconsin (1925-1946)
434.   Fort Gordon, Georgia (1942-present)
435.   Camp Pine/Fort Drum, New York (1941-1953, 1970-present)

APPENDIX 2

ALPHABETICAL LISTING OF ARMY POSTS
SHOWN ON MAPS 1 THROUGH 18

<u>Name</u>, <u>State</u> (<u>dates of existence</u>)	<u>Number</u>
Fort Abercrombie, North Dakota (1858-1877)	157
Aberdeen Proving Ground, Maryland (1918-present)	429
Abiquiu, New Mexico (1849-1851)	126
Fort Adams, Mississippi (1798-1810)	18
Fort Adams, Rhode Island (1798-1950)	21
Albuquerque, New Mexico (1847-1861)	124
Alcatraz Island, California (1859-1895)	182*
Fort Andrews, Massachusetts (1905-1946)	319**
Fort Apache, Arizona (1870-1925)	246*
Camp Arbuckle, Oklahoma (1850-1851)	105
Fort Arbuckle, Oklahoma (1851-1870)	152
Fort Armstrong, Iowa (1816-1836)	57
Fort Assinniboine, Montana (1879-1915)	288*
Camp Astoria, Oregon (1850-1851)	135
Fort Atkinson, Iowa (1840-1849)	96
Fort Atkinson, Louisiana (1822-1871)	83
Attakapas, Louisiana (1804-1819)	42
Austin, Texas (1845-1875)	111
Cantonment Badlands, North Dakota (1879-1883)	283
Fort Baker, California (1897-1947)	320*
Fort Baldwin, Maine (1917-1925)	399
Fort Banks, Massachusetts (1894-1950)	321
Fort Barrancas, Florida (1820-1946)	65*
Fort Barry, California (1908-1946)	322
Fort Bascom, New Mexico (1863-1870)	239
Baton Rouge Barracks, Louisiana (1810-1879)	43
Fort Bayard, New Mexico (1866-1895)	302*
Camp Beacon, California (1917-1925)	360*
Camp Beauregard, Louisiana (1917-1919, 1940-1946)	410
Fort Belknap, Texas (1851-1867)	151
Fort Belle Fontaine, Missouri (1805-1826)	38
Fort Bell Canton, Tennessee (1797-1800)	29
Fort Bellingham, Washington (1856-1860)	174
Fort Belvoir, Virginia (1912-present)	392

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*Estimated date of closing (± five years)

**Estimated dates of opening and closing (± five years)

Fort McClellan, Alabama (1917-present)	381
Camp McCoy, Wisconsin (1925-1946)	433**
Fort McDermit, Nevada (1865-1889)	257
Fort McDowell, Arizona (1865-1891)	247
Fort McHenry, Maryland (1794-1912)	23
Fort McIntosh, Pennsylvania (1778-1791)	2
Fort McIntosh, Texas (1845-1915)	117*
Fort McKavett, Texas (1852-1883)	194
Fort McKinley, Maine (1905-1946)	339**
Fort McLane, New Mexico (1860-1861)	164
Fort McPherson, Gecrgia (1865-present)	193
Fort McPherson, Nebraska (1863-1880)	205
Fort McRae, New Mexico (1863-1876)	238
Fort Meade, Florida (1849-1857)	99
Fort Meade, Maryland (1917-present	393
Fort Meade, South Dakota (1878-1946)	380
Fort Merrill, Texas (1850-1885)	118
Fort Mifflin, Pennsylvania (1798-1866)	22
Fort Miley, California (1900-1946)	324
Fort Missoula, Montana (1877-1946)	289
Fort Mitchell, Alabama (1813-1837)	62
Fort Mojave, Arizona (1859-1890)	187
Fort Monmouth, New Jersey (1917-present)	400
Fort Monroe, Virginia (1823-present)	88
Montery, California (1847-1865)	140
Presidio of Monterey, California (1903-present)	317
Fort Morgan, Florida (1834-1868)	94
Fort Morgan, Alabama (1905-1946)	340**
Fort Mott, New Jersey (1905-1945)	341**
Fort Moultrie, South Carolina (1826-1885, 1905-1945)	86*
Mount Vernon Barracks, Alabama (1873-1894)	275
Fort Myer, Virginia (1862-present)	273
Fort Myers, Florida (1850-1858)	100
Nachitoches, Louisiana (1804-1822)	41
Fort Nelson, Virginia (1794-1824)	24
Newport Barracks, Kentucky (1803-1894)	35
Fort Niagara, New York (1796-1962)	28
Fort Niobrara, Nebraska (1880-1905)	305*
Nogales, Arizona (1917-1935)	362**
Fort Norfolk, Virginia (1794-1824)	25
North Platte Station, Nebraska (1867-1877)	206
Oglethorpe Barracks, Georgia (1821-1851)	69
Fort Oglethorpe, Tennessee (1903-1946)	318
Fort Omaha, Nebraska (1868-1947)	204
Fort Ontario, New York (1796-1946)	27
Fort Ord, California (1933-present)	408
Fort Osage, Missouri (1808-1819)	37
Fort Pembina, North Dakota (1870-1895)	219
Camp Pena Colorado, Texas (1880-1893)	278
Fort Pickens, Florida (1834-1867)	93
Fort Pickering, Tennessee (1797-1810)	17
Fort Pierce, Florida (1838-1842)	90

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Fort Selden, New Mexico (1865-1890)                        236
Fort Severn, Maryland (1814-1845)                           48
Camp Shannon, New Mexico (1917-1925)                       364*
Fort Shaw, Montana (1867-1891)                             224
Camp Shelby, Mississippi (1917-1822, 1939-1946)            382
Fort Sheridan, Illinois (1887-present)                     312
Fort Sheridan, Nebraska (1874-1881)                        306
Fort Sherman, Idaho (1878-1895)                            290*
Fort Sidney, Nebraska (1867-1894)                          208
Fort Sill, Oklahoma (1869-present)                         200
Fort Smith, Arkansas (1817-1871)                            60
Fort Sisseton, South Dakota (1864-1889)                    215
Fort Snelling, Minnesota (1819-1947)                        55
Socorro, New Mexico (1849-1851)                            123
Sonoma, California (1847-1851)                             138
Southwest Point, Tennessee (1794-1806)                      11
Fort Spokane, Washington (1880-1895)                       293*
Fort Stanbaugh, Wyoming (1870-1878)                        228
Fort Standish, Massachusetts (1900-1946)                   405*
Camp Stanley, Texas (1917-1945)                            369*
Fort Stanton, New Mexico (1855-1896)                       163
Fort Steilacoom, Washington (1849-1868)                    136
Fort Stephens, Alabama (1799-1808)                          19
Fort Steuben, Ohio (1786-1796)                               3
Fort Stevens, Oregon (1865-1884)                           264
Fort Stevenson, North Dakota (1870-1895)                   220
Fort Stewart, Georgia (1940-present)                       425
Fort Stoddart, Alabama (1794-1814)                          40
Fort Story, Virginia (1917-    )                           391
Fort St. Philip, Louisiana (1803-1871)                      32
Fort Strong, Massachusetts (1905-1946)                     346
Fort Sullivan, Maine (1808-1873)                            46
Fort Sully, South Dakota (1863-1894)                       212
Fort Sumter, South Carolina (1826-1885, 1905-1945)          86
Fort Supply, Oklahoma (1868-1894)                          201
Fort Taylor/Key West Barracks, Florida (1831-1946)          92*
Camp Zachary Taylor, Kentucky (1918-1922)                  380
Fort Tejon, California (1854-1864)                          184
Fort Telfair, Georgia (1790-1795)                            5
Tellico Blockhouse, Tennessee (1794-1806)                   10
Fort Terry, New York (1899-1946)                           347*
Fort Thomas, Kentucky (1887-1946)                          316
Fort Thomas, Arizona (1876-1890)                           294
Fort Thompson, South Dakota (1864-1871)                    211
Camp Three Forks Owyhee, Idaho (1866-1871)                 256
Fort Totten/Willet's Point, New York (1862-1970)           348
Fort Totten, North Dakota (1867-1890)                      218
Camp Tobyanna, Pennsylvania (1925-1939)                    412**
Fort Townsend, Washington (1856-1895)                      294*
Fort Towson, Oklahoma (1824-1854)                           78
Fort Travis, Texas (1917-1945)                             370*
Fort Trumbull, Connecticut (1812-1915)                      67*
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APPENDIX 3

CHAIRMEN OF CONGRESSIONAL COMMITTEES
RELATED TO MILITARY MATTERS
1922-1976

1. **House Military Affairs/Armed Services Committee.**

Tenure	Name	District	Party
1922-24	Kahn, Julius	6th, Calif.	Republican
1925	McKenzie, John C.	13th, Ill.	Republican
1926-29	Morin, John M.	34th, Pa.	Republican
1930-32	James, W. Frank	12th, Mich.	Republican
1933-36	McSwain, John J.	4th, S. C.	Democrat
1937-38	Hill, Lister	2nd, Ala.	Democrat
1939-46	May, Andrew J.	7th, Ky.	Democrat
1947-48	Andrew, Walter G.	42nd, N. Y.	Republican
1949-52	Vinson, Carl	6th, Ga.	Democrat
1953-54	Short, Dewey	7th, Mo.	Republican
1955-64	Vinson, Carl	6th, Gal.	Democrat
1965-70	Rivers, L. Mendel	1st, S. C.	Democrat
1971-74	Hebért, F. Edward	1st, La.	Democrat
1975-76	Price, Melvin	23rd, Ill.	Democrat

2. **House Appropriations Committee.**

Tenure	Name	District	Party
1922-28	Madden, Martin B.	1st, Ill.	Republican
1929	Anthony, Daniel R.	1st, Kans.	Republican
1930-32	Wood, William R.	10th, Ind.	Republican
1933-38	Buchanan, James P.	10th, Tex.	Democrat
1939-42	Taylor, Edward T.	4th, Colo.	Democrat
1943-46	Cannon, Clarence	9th, Mo.	Democrat
1947-48	Taber, John	38th, N. Y.	Republican
1949-52	Cannon, Clarence	9th, Mo.	Democrat
1953-54	Taber, John	38th, N. Y.	Republican
1955-64	Cannon, Clarence	9th, Mo.	Democrat
1965-76	Mahon, George H.	19th, Tex.	Democrat

Subcommittee for Defense

Tenure	Name	District	Party
1973-76	Mahon, George H.	19th, Tex.	Democrat

SOURCE: U. S. Congress, Official Congressional Directory, 1922-1976.

3. <u>Senate Military Affairs/Armed Services Committee</u>.

<u>Tenure</u>	<u>Name</u>	<u>State</u>	<u>Party</u>
1922-27	Wadsworth, James W.	N. Y.	Republican
1928-32	Reed, David A.	Pa.	Republican
1933-42	Sheppard, Morris	Tex.	Democrat
1943-44	Reynolds, Robert R.	N. C.	Democrat
1945-46	Thomas, Elbert D.	Utah	Democrat
1947-48	Gurney, Chan	S. D.	Republican
1949-50	Tydings, Millard E.	Md.	Democrat
1951-52	Russell, Richard B.	Ga.	Democrat
1953-54	Saltonstall, L.	Mass.	Democrat
1955-68	Russell, Richard B.	Ga.	Democrat
1969-76	Stennis, John	Miss.	Democrat

4. <u>Senate Appropriations Committee</u>.

<u>Tenure</u>	<u>Name</u>	<u>State</u>	<u>Party</u>
1922-29	Warren, Francis E.	Wyo.	Republican
1930-32	Jones, Wesley L.	Wash.	Republican
1933-46	Glass, Carter	Va.	Democrat
1947-48	Bridges, Styles	N. H.	Republican
1949-52	McKellar, Kenneth	Tenn.	Democrat
1953-54	Bridges, Styles	N. H.	Republican
1955-68	Hayden, Carl	Ariz.	Democrat
1969-70	Russell, Richard B.	Ga.	Democrat
1971-72	Ellender, Allen J.	La.	Democrat
1973-76	McClellan, John L.	Ark.	Democrat

<u>Subcommittee for Defense</u>

1973-76	McClellan, John L.	Ark.	Democrat

5. <u>Joint Committee on Reduction of Federal Expenditures</u>.

<u>Tenure</u>	<u>Name</u>	<u>State/Dist</u>.	<u>Party</u>
1943-66	Byrd, Harry F.	Va.	Democrat
1967-74	Mahon, George H.	19th, Tex.	Democrat

6. <u>Joint Committee on Defense Production</u>.

<u>Tenure</u>	<u>Name</u>	<u>State/Dist</u>.	<u>Party</u>
1951-52	Maybank, Burnet R.	S. C.	Democrat
1953-54	Capehart, Homer E.	Ind.	Republican
1955-58	Robertson, A. W.	Va.	Democrat
1959-60	Brown, Paul	10th, Ga.	Democrat
1961-62	Robertson, A. W.	Va.	Democrat

1963-64	Patman, Wright	1st, Tex.	Democrat
1965-66	Robertson, A. W.	Va.	Democrat
1967-68	Patman, Wright	1st, Tex.	Democrat
1969-70	Sparkman, John	Ala.	Democrat
1971-72	Patman, Wright	1st, Tex.	Democrat
1973-74	Sparkman, John	Ala.	Democrat
1975-76	Patman, Wright	1st, Tex.	Democrat

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